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ENTERPRISE BUSINESS MODEL STRUCTURE

The DOE Enterprise Business Model (EBM) provides a Department-wide framework, organized hierarchically, for understanding DOE's business operations. The EBM is the foundation of the DOE EA, providing the main viewpoint for the analysis of DOE data, applications and services, and technology.

Exhibit 1 below illustrates the three tiers of the DOE EBM structure: DOE Line of Business, DOE Business Function, and DOE Sub Function.

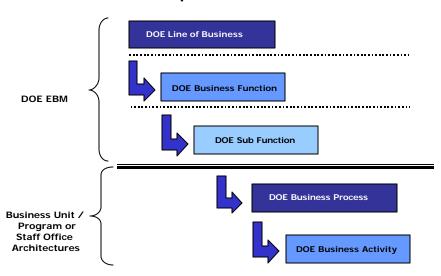


Exhibit 1: DOE Enterprise Business Model Structure

The definitions for each of these three tiers is as follows:

DOE Line of Business: A strategic categorization of DOE's work, organized around a specific aspect of its business mission to deliver a related set of services or products to external and/or internal business stakeholders. Lines of Business are executed through business functions, services, and processes and are independent of agencies, bureaus, offices, location or any other political or geographic boundary. They are established through legislation, executive direction, strategic plans, budgets and other direction setting actions. Within the context of DOE's business architecture, DOE Lines of Business occupy the top level of DOE's Enterprise Business Model, just above DOE business functions.

DOE Business Function: An ongoing functional capability of the Department sustained over time and executed to carry out DOE's mission and business operations. DOE business functions are independent of both the DOE business units that might perform them, and locations where they might be performed. DOE business functions are executed in support of DOE Lines of Business and occupy the second level (out of three) of the Department's Enterprise Business Model, just below DOE Lines of Business and above DOE business sub functions.

DOE Business Sub Function: Detailed business activities performed in support of a particular DOE business function. DOE business sub functions are lower level decompositions of DOE business functions. They occupy the third or lowest level (out of three) of the Department's Enterprise Business Model, just below DOE business functions.

Exhibit 1 also shows that the DOE EBM defines the Department's business through the sub-function level. Additional detailing of the processes and activities that make up each sub-function is undertaken through DOE's business unit (i.e., program and staff office) architecture efforts. Through each program and staff office architecture effort, sub-functions will be decomposed into supporting processes and activities. This will enable more detailed analysis within the other architectural layers- Data, Applications, and Technology- such as what data is being processed at the activity and process levels, or what services and technologies support those activities and processes.

1.2. ENTERPRISE BUSINESS MODEL OVERVIEW

The DOE Enterprise Business model was created following a functionally-driven approach, where business functions were identified independent of the DOE business units or locations performing them. This method enhances the value of the model as a decision-making tool, as it looks neutrally across geographic and business unit boundaries and stove-piped processes to expose opportunities for collaboration and standardization Department-wide.

DOE Lines of Business DOE Mission LOBs DOE General Management LOB General Environment Energy LOB Management Science LOB Defense LOB LOB LOB **DOE Mission Functions General Management Functions** Human Planning and International Environmental Administrative Resource Construction Stocknile Resource Services **Affairs** Management Management Allocation Testing Information Facilities and Manufacturing Counter-**Partnership** Controls & Infrastructure **Public Affairs** Technology Intelligence Management Oversight Management Production Site and Management Facility Remediation Internal Risk General Mission **Financial** Regulatory Emergency Energy Data & Statistics Regulatory Assistance Transmission Management and Mitigation Development and Marketing Development Site and Facility Stewardship Material and Mission Research & Financial Judicial Revenue Education Development Collection Activities Training Management Management Safety and Financial Legislative Supply Chain Non Engineering Intelligence Health Relations Management

Exhibit 2: DOE Enterprise Business Model Overview

As depicted in Exhibit 2, at its highest level, the DOE EBM consists of five Lines of Business (LOBs). The four Mission LOBs--Defense, Energy, Science, and Environment-- characterize a *strategic view* of DOE's business (i.e., *why* DOE exists), in that they represent the essence of DOE's strategic business direction and mission. Because of the necessity of enabling administrative and general management type business functions to the Mission LOBs, DOE has designated a fifth LOB for General Management (GM).

Proceeding down through the business model, the next level depicts a *tactical view* of DOE's business (i.e., *HOW* DOE delivers its goods and services). Each LOB provides a set of business services to stakeholders and plays a unique role in the execution and fulfillment of DOE's overall mission. In order to provide business services, LOBs carry out a set of business functions (e.g., Mission Functions and GM Functions). As Exhibit 2 shows, these business functions are categorized as Mission Functions and General Management Functions. Mission Functions can be further broken down into Unique and Common Functions, as illustrated by the Mission Function by LOB view of the EBM illustrated in Exhibit 3 below.

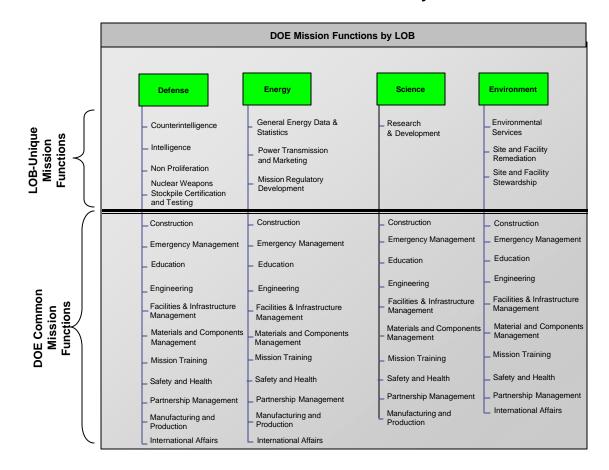


Exhibit 3: DOE Mission Functions by LOB

High-level descriptions of each of the major groups of entities depicted in these two views of the business model follow:

- DOE Mission Lines of Business: The Defense, Energy, Science, and Environment LOBs are the
 four external, stakeholder-facing business areas through which DOE delivers the entirety of its
 programs and services that support the achievement of its strategic goals, objectives, and
 overarching mission.
- Mission Functions: The core business functions that are executed in support of the overarching DOE mission as defined by the four DOE Mission LOBs. Two types of Mission Functions exist:
 - LOB-Unique Mission Functions: A Mission Function performed by only a single LOB.
 - DOE Common Mission Functions: A Mission Function performed by multiple LOBs.
- **General Management Line of Business:** The internal stakeholder-facing LOB. The business functions it encompasses include all of the fundamental, administrative, general management type functions that cut across all of DOE, supporting all four Mission LOBs.

General Management Functions: These fundamental, cross-cutting functions enable the execution of the DOE Mission Functions. These functions provide the critical policy, programmatic, planning, reporting, and managerial foundation to support the Department's strategic operations, as well as the critical day-to-day, back-office support activities such as financial, human, goods and services, and information management that enable DOE to operate effectively.

All DOE Mission LOB and General Management functions are identified and defined in Appendix A.

THE MODEL IN USE 1.3.

Being that it is a functional model, the EBM's most inherent and beneficial characteristic is that at its highest levels it describes DOE's business operations autonomous of the DOE business units or sites that perform them. For example, a DOE business function such as Research and Development has been defined in a way that is inclusive of all the various types of research, both basic and applied, that DOE conducts, regardless of which research facility it is performed at or which DOE program sponsors it. This concept of organization and location neutrality is illustrated in Exhibit 5, which shows that the Research and Development function is performed via multiple DOE program offices and at several DOE sites.

It is at the EBM's sub function level where linkages between it and DOE business units and/or programs start to become more evident. In many instances, a DOE sub function's name closely resembles the name of the specific business unit or program that it supports. This type of nomenclature aids in the identification of areas to analyze for commonality, cross-cutting initiatives, redundancies, and opportunities for collaboration and standardization. Exhibit 5 depicts this concept by showing a clear line of sight between DOE business units and their corresponding sub functions. For example, the Office of Environment, Safety and Health (EH) conducts Environmental Services Research and Development in support of its mission-specific programs in the areas of environmental protection, and employee and public safety and health.

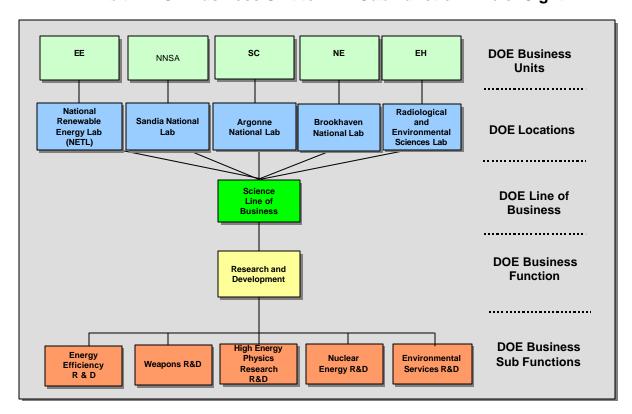


Exhibit 4: DOE Business Unit to EBM Sub Function Line of Sight

1.4. RELATIONSHIP TO THE FEDERAL ENTERPRISE ARCHITECTURE BUSINESS REFERENCE MODEL

The DOE EBM is a functionally-driven framework that is aligned with the Federal Enterprise Architecture Business Reference Model (FEA BRM), as shown in Exhibit 5. An understanding of this alignment is essential for discovering opportunities for collaboration across the Government with other Federal entities that perform similar or complimentary functions and processes as DOE. The FEA BRM provides an organizationally-neutral, common point-of-reference that all agencies can map their individual business models to. Thus, allowing them to quickly expose areas of commonality by using the FEA BRM's standard taxonomy and functional lexicon to describe Federal business operations.

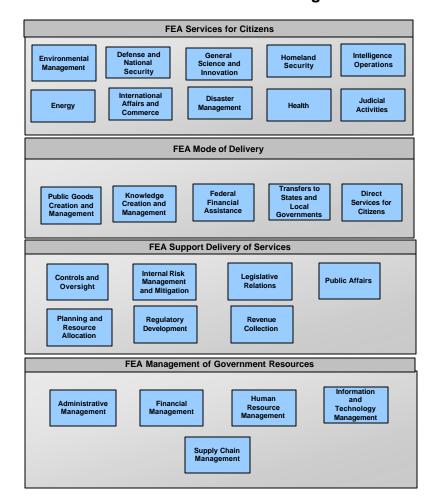


Exhibit 5: FEA BRM Lines of Business Aligned to DOE EBM

Exhibit 5 represents a sub set of the FEA BRM, illustrating those FEA Lines of Business that the DOE EBM directly maps to. Each DOE Mission LOB sub function has a primary mapping to a FEA Services for Citizens sub function and a secondary mapping to a FEA Mode of Delivery sub function. For example, the Fossil Fuel Research and Development DOE sub function maps primarily to Energy Supply sub function within the FEA Services for Citizens business area, and has a secondary mapping to the Research and Development sub function within the FEA Mode of Delivery business area. DOE's General Management Line of Business (GM LOB) and its encompassed functions align in-whole to the bottom two levels of the FEA BRM (Support Delivery of Services and Management of Government Resources), providing a one-to-one mapping between these DOE EBM sub-functions and their corresponding FEA BRM sub-functions (i.e., the DOE BRM's Administrative Management function and all of its sub functions are identical to those under the FEA BRM).

A comprehensive mapping of the DOE EBM to the FEA BRM is provided in Appendix B.

1.5. DOE BUSINESS REFERENCE MODEL DETAILS

The DOE BRM is comprised of 5 Lines of Business, 37 business functions and numerous sub-functions. Each of the LOBs is further defined in the following sections to include the following information:

- Descriptions and DOE mission-enabling responsibilities of each LOB.
- Functional Hierarchy Diagram for each LOB depicting its Unique and Common Functions .

1.5.1. Defense LOB

The Defense Line of Business uses advanced science and nuclear energy to support military capabilities designed to ensure the Nation's national security. It encompasses the development, maintenance, and security of the US nuclear weapons stockpile, including stockpile facilities and nuclear research sites and laboratories; the non proliferation of weapons of mass destruction technologies and capabilities; and the development, maintenance, and operational support for nuclear propulsion systems for the U.S. Navy. Intelligence and counterintelligence functions designed to identify threats to and protect nuclear weapons information, assets, infrastructure, and personnel also fall within the auspices of the Defense Line of Business.

A functional hierarchy diagram depicting the Defense LOB functions is shown in Exhibit 6 below. The following appendices provide additional details about the Defense LOB and its relationships to other business layer elements:

- Appendix A Relationship: DOE EBM Definitions
- Appendix B Relationship: DOE EBM to FEA BRM
- Appendix C Relationship: Enterprise Business Model to DOE Business Units

Defense LOB Defense Counterintelligence **OB-Unique** Intelligence Non Proliferation **Nuclear Weapons** Stockpile Certification and Testing Construction **Emergency Management** Education Engineering **JOE Common** Facilities & Infrastructure Mission Management Materials and Components Management Mission Training Safety and Health Partnership Management Manufacturing and

Exhibit 6 - Defense LOB: Functional Hierarch Diagram

1.5.2. Energy LOB

The Energy Line of Business allows DOE to ensure the national and economic security of the US by promoting a diverse and reliable supply and delivery of affordable and environmentally sound energy. DOE accomplishes this through the research, development, demonstration, and deployment of policies, advanced technologies, standards, and processes that- enable a safe and reliable modernized energy delivery infrastructure; diversify energy supply by harnessing the power of clean, sustainable and renewable energy sources; permit cleaner and energy maximizing conversion of fossil fuel and nuclear fuel sources; maximize production from existing fuel reserves; and improve energy efficiency by improving energy usage.

Production

International Affairs

A functional hierarchy diagram depicting the Energy LOB functions is shown in Exhibit 7 below. The following appendices provide additional details about the Defense LOB and its relationships to other business layer elements:

- Appendix A Relationship: DOE EBM Definitions
- Appendix B Relationship: DOE EBM to FEA BRM

• Appendix C – Relationship: Enterprise Business Model to DOE Business Units

Energy LOB Energy General Energy Data & Statistics Power Transmission and Marketing Mission Regulatory Development Construction **Emergency Management** Education Engineering **JOE Common** Facilities & Infrastructure Mission Management Materials and Components Management Mission Training Safety and Health Partnership Management Manufacturing and Production International Affairs

Exhibit 7 - Energy LOB: Functional Hierarchy Diagram

1.5.3. Science LOB

The Science Line of Business provides the world-class general and applied scientific research and technology generation capacity that supports the execution and fulfillment of Department missions in national security; energy diversity and reliability; energy efficiency; improved environmental stewardship and quality; and advancement of knowledge in the physical, biological, medical, environmental, and computational sciences.

The Department takes its responsibilities toward science and technology seriously because it takes its responsibility towards national security seriously. The Department's research activities are closely coordinated with, and synergistic to, the activities of other Federal agencies including the Defense Advanced Research Projects Agency (DARPA), Environmental Protection Agency (EPA), National Aeronautics and Space Administration (NASA), National Institutes of Health (NIH), National Security

Agency (NSA), and National Science Foundation (NSF). The Department also promotes the transfer of the results of its basic research to a broad set of technologies such as advanced materials, national defense, medicine, space science and exploration, and industrial processes. The Department has taken a deliberate and integrated approach to its research and development portfolio, using the strengths of all our programs to address this central mission. Clearly, environmental security and economic security underpin national security, and each is sustained by science.

A functional hierarchy diagram depicting the Science LOB functions is shown in Exhibit 8 below. The following appendices provide additional details about the Defense LOB and its relationships to other business layer elements:

- Appendix A Relationship: DOE EBM Definitions
- Appendix B Relationship: DOE EBM to FEA BRM
- Appendix C Relationship: Enterprise Business Model to DOE Business Units

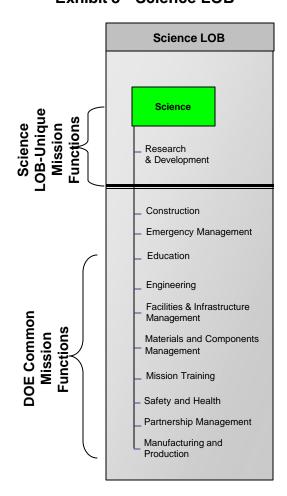


Exhibit 8 - Science LOB

1.5.4. Environment LOB

The Environment Line of Business provides DOE with the capabilities needed to protect the environment by cleaning up nuclear weapons manufacturing, testing, and research sites, preparing them for eventual return to Federal civilian authorities, state or local community; and providing for the permanent and safe handling, transport, and disposal of the chemical and radioactive waste recovered from its cleanup efforts and civilian nuclear power generation.

A functional hierarchy diagram depicting the Environment LOB functions is shown in Exhibit 9 below. The following appendices provide additional details about the Defense LOB and its relationships to other business layer elements:

- Appendix A Relationship: DOE EBM Definitions
- Appendix B Relationship: DOE EBM to FEA BRM
- Appendix C Relationship: Enterprise Business Model to DOE Business Units

Environment LOB Environment Environmental -OB-Unique Environment Services Functions Site and Facility Remediation Site and Facility Stewardship Construction **Emergency Management** Education Engineering **JOE Common** Facilities & Infrastructure **Functions** Mission Management Material and Components Management Mission Training Safety and Health Partnership Management International Affairs

Exhibit 9 - Environment LOB: Functional Hierarchy Diagram

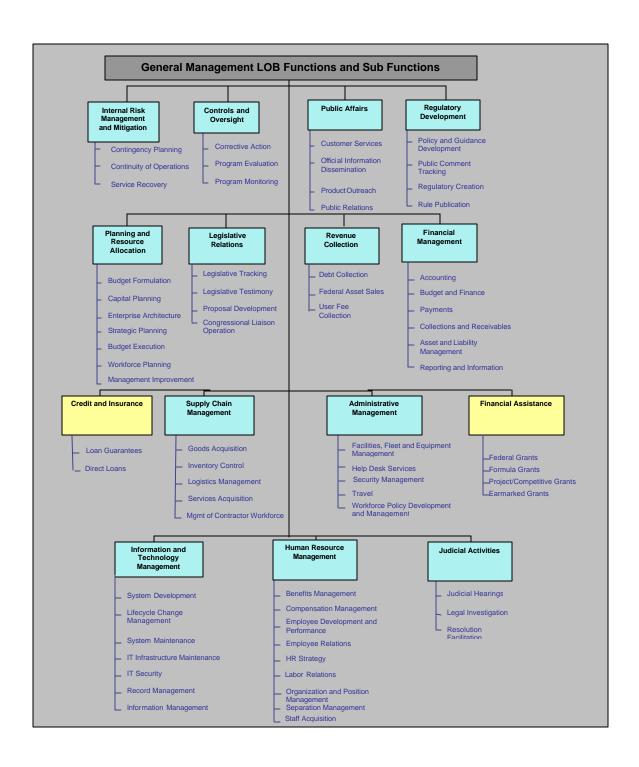
1.5.5. **General Management LOB**

The General Management Line of Business encompasses the Department's cross-cutting support business functions and processes performed by most DOE business units. These functions and processes provide the critical policy, programmatic, planning, reporting, and managerial foundation to support the Department's strategic operations, as well as the critical day-to-day, back-office support activities such as financial, human, goods and services, and information management that enable DOE to operate effectively.

A functional hierarchy diagram depicting the General Management LOB functions is shown in Exhibit 10 below. The following appendices provide additional details about the Defense LOB and its relationships to other business layer elements:

- Appendix A Relationship: DOE EBM Definitions
- Appendix B Relationship: DOE EBM to FEA BRM
- Appendix C Relationship: Enterprise Business Model to DOE Business Units

Exhibit 10 - General Management: Functional Hierarchy Diagram



APPENDIX A. ENTERPRISE BUSINESS MODEL DEFINITIONS

LINES OF BUSINESS

Defense Line of Business

The Defense Line of Business uses advanced science and nuclear energy to support military capabilities designed to ensure the Nation's national security. It encompasses the development, maintenance, and security of the US nuclear weapons stockpile, including stockpile facilities and nuclear research sites and laboratories; the non proliferation of weapons of mass destruction technologies and capabilities; and the development, maintenance, and operational support for nuclear propulsion systems for the U.S. Navy. Intelligence and counterintelligence functions designed to identify threats to and protect nuclear weapons information, assets, infrastructure, and personnel also fall within the auspices of the Defense Line of Business.

Energy Line of Business

The Energy Line of Business allows DOE to ensure the national and economic security of the US by promoting a diverse and reliable supply and delivery of affordable and environmentally sound energy. DOE accomplishes this through the research, development, demonstration, and deployment of policies, advanced technologies, standards, and processes that- enable a safe and reliable modernized energy delivery infrastructure; diversify energy supply by harnessing the power of clean, sustainable and renewable energy sources; permit cleaner and energy maximizing conversion of fossil fuel and nuclear fuel sources; maximize production from existing fuel reserves; and improve energy efficiency by improving energy usage.

Science Line of Business

The Science Line of Business provides the world-class general and applied scientific research and technology generation capacity that supports the execution and fulfillment of Department missions in national security; energy diversity and reliability; energy efficiency; improved environmental stewardship and quality; and advancement of knowledge in the physical, biological, medical, environmental, and computational sciences.

Environment Line of Business

The Environment Line of Business provides DOE with the capabilities needed to protect the environment by cleaning up nuclear weapons manufacturing, testing, and research sites, preparing them for eventual return to Federal civilian authorities, state or local community; and providing for the permanent and safe handling, transport, and disposal of the chemical and radioactive waste recovered from its cleanup efforts and civilian nuclear power generation.

General Management Line of Business

The General Management Line of Business encompasses the Department's cross-cutting support business functions and processes performed by most DOE business units. These functions and processes provide the critical policy, programmatic, planning, reporting, and managerial foundation to support the Department's strategic operations, as well as the critical day-to-day, back-office support activities such as financial, human, goods and services, and information management that enable DOE to operate effectively.

MISSION LOB FUNCTIONS AND SUB FUNCTIONS

Construction: Encompasses programs and sub functions which DOE executes to plan, design, and build its facilities and infrastructure, including weapons facilities, scientific research facilities, waste storage facilities etc.

- Defense Facilities Construction: Encompasses the processes and activities that allow DOE to plan, design, and manage the construction of its nuclear weapons facilities and sites.
- Nuclear Energy Facilities Construction: Encompasses the processes and activities that allow DOE to plan, design, and manage the construction of the nuclear facilities and infrastructure used to support advanced nuclear energy research; produce isotopes used in medicine, scientific research and homeland security; to provide radioisotope power systems for space exploration and national security; and to produce and disposition nuclear fuel for use in civilian applications.
- Science and Research Facilities Construction: Encompasses the processes and activities DOE performs to plan, design, and construct its scientific research facilities, such as research reactors, research laboratories, and particle accelerators. Encompasses the performance and evaluation of preliminary design studies focusing on developing the concept of a new or enhanced scientific research facility; developing the conceptual, engineering, safety, and other facility designs; and conducting independent technical, cost, schedule, and management reviews of construction projects and large experimental equipment, and monitoring actions to correct design and/or construction deficiencies.
- Strategic Fuel Reserves Infrastructure Construction: Encompasses the processes and activities that DOE performs to plan, design, and construct the facilities and infrastructure that receive, store and house the Strategic Petroleum Reserve and the Northeast Home Heating Oil Reserve, such as underground storage facilities, coast line storage terminals, tanks, etc.
- Toxic Waste Repository Construction: Encompasses the processes and activities that are performed to plan, design, and build the hazardous waste storage facilities, such as geological waste repositories, and their supporting infrastructure, which permanently house the nation's treated radioactive, chemical, and biological waste. Construction planning processes include preparing, filing, and defending licenses with the Nuclear Regulatory Commission, and permits with EPA, to build the geological waste repository and receive and store waste upon its completion.

Counterintelligence: Encompasses information gathering and other activities performed to protect against espionage or other intelligence activities, sabotage, or assassinations conducted for or on behalf of foreign powers, organizations, or persons or international terrorist activities, but not including personnel, physical, document, or communications security programs.

- Counterintelligence Information Dissemination: Communicates the hostile foreign intelligence threat to DOE personnel and other agencies, as required. Advises other DOE organizations on foreign threats.
- Cyber Threat Response: Conducts cyber activities to detect, deter, investigate, exploit and neutralize foreign power cyber threats directed towards DOE assets.
- Investigations: Conducts fact-finding and information gathering to determine whether national security is being threatened and/or damaged by activities against DOE personnel, information, activities, facilities, and technologies or systems by or on behalf of foreign powers, organizations or persons, or international terrorist organizations.

Education: Encompasses the DOE sub functions that promote the education and skill development of both DOE and non-DOE individuals, including Federal civilian and Defense personnel, and private citizens, students, and teachers. Specifically encompasses the sub functions through which DOE provides scientific opportunities for student and teachers interested in math, history, science, engineering, and other technical fields, in efforts to preserve America's competitive advantage by cultivating a technically inclined workforce.

Defense Education: Encompasses naval reactor education which involves the class-room teaching of Navy personnel on the conceptual and theoretical information that is a prerequisite to the technical, hands-on operational Naval Reactor Mission Training. Includes the nuclear education activities at the national laboratories which encompasses developing partnerships with universities, supporting graduate fellowships, and developing nuclear education exchange programs.

- **Historic Preservation:** Encompasses the activities DOE performs to manage cleaned up legacy sites preserved as historical sites representing America's nuclear legacy.
- **Student Development:** Enables DOE to develop and administer math, science, and engineering educational programs for K-12 and undergraduate students, such as internships at DOE research facilities, and middle and high school Science Bowl competitions.
- **Teacher Development:** Enables DOE to design and administer professional development programs for elementary school, secondary school, and university math and science teachers and faculty, such as fellowships and DOE-sponsored research programs.
- University Reactor Infrastructure and Education Assistance: Improves existing university
 nuclear engineering infrastructure (e.g., research and training reactors) and assists these
 institutions manage their nuclear fuel supply to ensure the existence of effective facilities and
 resources to train and educate our nuclear workforce. Also provides support for education and
 research activities in nuclear related fields that will benefit the Nation's universities, laboratories,
 private sector and government.

Emergency Management: Encompasses sub functions that allow DOE to ensure the adequacy of emergency preparedness and management activities for any non-routine incidents involving hazardous materials (ie, radioactive, chemical, biological, etc.), including attacks and accidents at DOE facilities, sites, along shipping corridors, and international facilities.

- Emergency Management Planning and Procedure Development: Encompasses the
 processes and activities undertaken to develop technical emergency management and response
 programs and procedures to be used to prevent and mitigate any non-routine incidents involving
 hazardous materials under the Department's stewardship, including but not limited to attacks or
 accidents.
- Emergency Response: Encompasses the immediate actions DOE takes to respond to a non-routine incident involving hazardous materials under the Department's stewardship. These actions include, but are not limited to, providing mobile telecommunications, operational support, power generation, hazardous material containment, search and rescue, and medical life saving actions.
- Foreign Nuclear Risk Reduction / Safety: Encompasses processes and activities that mitigate the risk and impact of accidents at foreign nuclear facilities. Accident prevention efforts include strengthening emergency response capabilities in nuclear empowered foreign nations, and the establishment of emergency management programs in the event accidents do occur, in collaboration with the IAEA and other countries.

Engineering: Encompasses the sub functions that apply the results of scientific research to design, develop, and test new technologies, components, and processes. Engineering focuses on the development of wide-scale technologies and components that can be mass produced; not the fabrication of one-time components used in very specific research techniques found in the Research & Development Function. Much of DOE's engineering efforts are collaborative, done in conjunction with private industry, non-profit organizations, universities, other Federal agencies, and state and local governments.

Cleanup Technology Engineering: Encompasses the application of scientific research findings
to design, develop, and assess decontamination technologies, processes, and techniques to be
deployed for site cleanup, waste treatment and removal, and soil and water decontamination
projects.

- Energy Efficiency Technology Engineering: Encompasses the application of scientific research findings to design, develop, and assess energy efficient technologies and processes used in public and commercial buildings, homes, and appliances; industrial plant and equipment; power generation, transmission, storage, and distribution infrastructure; and vehicle power systems and components (e.g., hydrogen fuel cells).
- Energy Transmission and Distribution Technology Engineering: Encompasses the activities that apply scientific research findings to design, develop, and assess advanced energy transmission and distribution technologies (e.g., superconductivity) used to modernize the nation's electricity delivery infrastructure.
- Environmental Services Technology Engineering: Encompasses the application of scientific
 research findings to design, develop, and assess technologies and processes used to mitigate
 and monitor the environmental and public health impact of DOE operations, implement and
 enforce environmental protection policies and practices at DOE facilities, and provide adequate
 emergency response capabilities.
- Fossil Fuel Technology Engineering: Encompasses the application of scientific research findings to design, develop, and assess efficient, reliable, production maximizing, and environmentally sound oil and gas exploration, drilling, fuel delivery, and power generation technologies and processes including clean burning fuel technologies (e.g., zero-emission power plant, clean coal technologies, etc.); and carbon sequestration techniques.
- Naval Reactor Technology Engineering: Encompasses the processes and activities that apply
 scientific research findings to design, develop, and test technologies, materials, and components
 for next generation naval reactors and their manufacturing processes. In addition it encompasses
 the activities that help develop safety and technical standards and regulations associated with the
 manufacturing, operation, maintenance, and disposition of naval reactors and their components.
- Non Proliferation Technology Engineering: Encompasses the processes and activities that
 apply scientific research findings to design, develop, and assess new non proliferation
 technologies, components, and processes used to manufacture devices and equipment for the
 detection of weapons of mass destruction, monitoring of nuclear testing, dismantlement of
 nuclear warheads, and other non proliferation efforts.
- Renewable Energy Technology Engineering: Encompasses the application of scientific research findings to design, develop, and assess commercially viable technologies for use in the production, storage, delivery, and consumption of alternative and renewable energy sources.
- **Security Technology Engineering:** Encompasses the application of scientific research to design, develop, and test new security technologies, capabilities, and processes used in the safeguard and protect DOE information, assets, and physical resources.
- Waste Disposition Technology Engineering: Encompasses the application of scientific
 research findings to design, develop, and assess technologies, processes, equipment, and
 techniques used to handle, transport, and permanently store the nation's radioactive, chemical,
 and biological waste and spent nuclear fuel at waste storage facilities. Includes design of waste
 containers and vehicles used to transport waste between facilities and sites. Encompasses
 development of techniques and technologies used in the design and operation of the storage
 facilities.
- Weapons Engineering: Encompasses the processes and activities that apply scientific research
 findings to design, develop, and assess new nuclear weapons technologies, components,
 assembly processes, and testing and evaluation methods used in the manufacturing, testing,
 maintenance, and refurbishment of nuclear weapons.

Environmental Services: Encompasses the sub functions that enable DOE to implement and monitor operational technologies and policies that mitigate the environmental impact of its operations on the environment.

- Environmental Monitoring: Encompasses the monitoring and analysis activities that help evaluate the environmental impact of DOE's operations, assessing compliance with DOE and Federal environmental protection policies and regulations. The results of this analysis drive environmental t policy development.
- Environmental Safeguarding: Involves the implementation of environmental protection practices at DOE facilities, ensuring compliance with DOE and Federal policies and regulations.

Facilities and Infrastructure Management: Encompasses the sub functions DOE performs to acquire, operate, secure, maintain, and retire its Defense, science and research, non-Defense nuclear energy, and environmental facilities, sites, and non-IT infrastructure.

- Defense Facilities Acquisition: Encompasses the processes and activities DOE performs to acquire (ie., buy) its manufacturing, storage, and testing facilities and sites.
- Defense Facilities Disposition: Encompasses the processes and activities undertaken to retire an aging or obsolete Defense facility or site. Encompasses deactivation and decommission processes.
- Defense Facilities Maintenance: Encompasses the maintenance processes and activities that DOE performs to ensure that Defense facilities and sites remain reliable and operational.
- Defense Facilities Operations: Encompasses the processes and activities that allows DOE to perform the daily operation of Defense facilities and sites.
- Defense Facilities Security: Encompasses the security processes and activities DOE performs to safeguard the structures, technologies, equipment, and physical information at Defense facilities and sites.
- Nuclear Energy Facilities and Infrastructure Acquisition: Encompasses the processes and activities DOE performs to acquire (ie., buy) its non-Defense nuclear facilities and infrastructure dedicated to advanced nuclear energy research, medical and industrial isotope production, radioisotope power systems development, and production and disposition of nuclear fuel used in civilian applications.
- Nuclear Energy Facilities and Infrastructure Disposition: Encompasses the processes and activities undertaken to retire aging or obsolete non-Defense nuclear energy facilities, sites, and infrastructure. Encompasses deactivation and decommission processes.
- Nuclear Energy Facilities and Infrastructure Maintenance: Encompasses the maintenance processes and activities that DOE performs to ensure that non-Defense nuclear energy facilities, sites, and infrastructure remain reliable and operational.
- Nuclear Energy Facilities and Infrastructure Operations: Encompasses the processes and activities that allows DOE to perform the daily operation of non-Defense nuclear energy facilities, sites, and infrastructure.
- Nuclear Energy Facilities and Infrastructure Security: Encompasses the security processes and activities DOE performs to safeguard the structures, technologies, equipment, and physical information at non-Defense nuclear energy facilities, sites, and infrastructure.

- Strategic Fuel Reserves Facilities Maintenance: Encompasses the maintenance processes and activities that DOE performs to ensure that the facilities which house the Strategic Petroleum Reserve and the Northeast Home Heating Oil Reserve stockpiles remain reliable and operational.
- Strategic Fuel Reserves Facilities Operations: Encompasses the day-to-day activities that DOE performs to operate the facilities which house the Strategic Petroleum Reserve and the Northeast Home Heating Oil Reserve stockpiles.
- Strategic Fuel Reserves Facilities Security: Encompasses the security processes and activities DOE performs to safeguard the facilities which house the Strategic Petroleum Reserve and the Northeast Home Heating Oil Reserve stockpiles, as well as the fuel inventories themselves.
- Science and Research Facilities and Infrastructure Acquisition: Encompasses the processes and activities DOE performs to plan and acquire (ie., buy) its scientific research facilities.
- Science and Research Facilities and Infrastructure Disposition: Encompasses the processes and activities DOE performs to retire and dispose of its aging and obsolete scientific research facilities. Encompasses facility deactivation and decommissioning.
- Science and Research Facilities and Infrastructure Maintenance: Encompasses the processes and activities that allow DOE to modernize its scientific research facilities, infrastructure, and equipment with new technologies.
- Science and Research Facilities and Infrastructure Operations: Encompasses the processes and activities that enable DOE to manage the daily operations of its scientific research facilities in a safe, environmentally sound, and economical manner.
- Science and Research Facilities and Infrastructure Security: Comprised of security processes and activities DOE performs to safeguard its research facilities, their supporting infrastructure, and encompassed equipment and information. These facilities and infrastructure include research reactors, research laboratories, particle accelerators, etc.
- Toxic Waste Repository Acquisition: Encompasses the processes and activities that allow DOE performs to plan and acquire hazardous waste storage facilities.
- Toxic Waste Repository Maintenance: Encompasses the maintenance processes and activities that allow DOE to ensure that the facilities which house hazardous waste remain reliable and operational.
- Toxic Waste Repository Operations: Encompasses the processes and activities that are required to support the daily operations of hazardous waste (eg., radioactive, chemical, and biological waste) storage facilities, such as a geological nuclear waste repositories. Please note that this does not encompass the management of the actual waste housed at these facilities.
- Toxic Waste Repository Security: Encompasses the processes and activities that allow DOE to safeguard hazardous waste and the facilities and sites that house it.

General Energy Data and Statistics: Encompasses the sub functions that DOE performs to collect, analyze, and disseminate energy information and statistics, as well as develop models to determine energy transmission bottlenecks and forecast energy trends, both of which support policy development.

• Energy Markets Forecasting: Involves the data collection and analysis processes and activities DOE performs to formulate both near-term (< 2 years) and long-term (< 20 years) forecasts of energy markets, considering factors such as supply, imports, distribution, conversion, and consumption for all energy sources used in the United States.

- Energy Transmission and Distribution Modeling and Simulation: Encompasses the
 modeling and analysis processes and activities, including development of data and analytical
 tools, DOE conducts to evaluate the physical bottlenecks, and regulatory and institutional barriers
 that interfere with the transmission and distribution of electricity from the point-of-generation to
 the point-of-end use. The results of these policy modeling activities support the development of
 market-based federal, regional, state, and local policies and regulations that address electric grid
 bottlenecks and congestion, optimizing grid performance.
- Energy Use and Efficiency Statistics: Involves the data collection, analysis, and dissemination processes and activities DOE performs to calculate energy use by households, commercial buildings, and manufacturing industries.
- Fossil Energy Statistics: Involves the data collection, analysis, and dissemination processes
 and activities DOE performs to provide petroleum, coal, and natural gas data, information,
 analyses, and forecasts to support informed public and private policy formulation and decisionmaking.
- Nuclear Energy Statistics: Involves the data collection, analysis, and dissemination processes
 and activities DOE performs to provide nuclear energy data, information, analyses, and forecasts
 to support informed public and private policy formulation and decision-making.
- Renewable Energy Statistics: Involves the data collection, analysis, and dissemination processes and activities DOE performs to provide alternative fuel data, information, analyses, and forecasts to support informed public and private policy formulation and decision-making.

Intelligence: TBD

TBD

International Affairs: Involves the non-military activities DOE participates in either directly or in conjunction with other Federal agencies (e.g. US State Department) to promote U.S. policies and interests beyond our national borders, including the negotiation of conflict resolution, treaties, and agreements. In addition, this function encompasses foreign economic development and social/political development; diplomatic relations with other Nations; humanitarian, technical and other developmental assistance to key Nations; and global trade.

- Energy Transmission Industry Regulatory Compliance: Encompasses processes and activities that help develop and ensure compliance with cross-border (Canada and Mexico) electricity trade regulations.
- International Technology Development and Transfer: Encompasses the processes and activities DOE performs to develop alliances and agreements with foreign nations that facilitate joint development of, access to, and transfer of key environmental remediation; waste disposition; and environmentally sound energy production, delivery, and consumption processes, technologies and components (eg, clean coal technology, cleanup process and technologies, waste handling and storage technologies, etc.). These activities enable these nations, who do not have the resources to develop the technologies themselves, to collaborate with the US to modernize their energy infrastructure, making it more environmentally sound, and to identify processes to remediate their polluted sites.
- Non Proliferation Agreement Development: Encompasses the processes and activities that contribute to the research, formulation, and support of arms control and international non-proliferation policies, agreements, and initiatives that prevent the spread of materials, technology, and expertise related to weapons of mass destruction.
- Oil and Gas Import and Export Regulatory Development: Encompasses DOE's regulatory development processes and activities with respect to US natural gas imports and exports.

Manufacturing and Production: Encompasses the sub functions DOE performs in the fabrication or production of its components, systems, processes, and other marketable and non marketable goods.

- **Naval Reactor Production:** Encompasses the manufacturing processes and activities that produce next generation naval vessel nuclear reactors, applying new technologies, manufacturing methods, and materials.
- **Nuclear Fuel Production:** Encompasses the processes and activities that produce adequate amounts of low enriched uranium that fuel the Department's research reactors. Encompasses processing and enrichment of natural uranium.
- Radioactive Isotope Production: Encompasses the processes and activities that enable DOE
 to produce stable and radioactive isotope products and services for commercial, medical, and
 research applications, where private sector capacity does not exist to meet domestic demand.
- Weapons Production: Encompasses the processes and activities that deploy new nuclear weapons technologies, components, and assembly processes in the assembly and manufacturing of new nuclear warheads and systems.

Material and Components Management: Encompasses the sub functions DOE performs to support of the daily management of manufactured or produced DOE components, materials, systems, stockpiles, etc. Encompasses handling, transportation, and operational activities.

- Naval Reactor Operations: Encompasses the processes and activities that ensure the safety, integrity, and performance of existing naval nuclear reactors, including the inspection, installation, certification, maintenance, overhaul, and disposition of operational and out of service reactors and their components.
- Nuclear Fuel Supply Management: Encompasses the processes and activities that enable fuel supply security and disposition of low and excess uranium supplies used in research reactors and nuclear energy production (ie, non-Defense civilian and commercial applications, including sale of surplus uranium.
- Nuclear Material Transport: Encompasses the operational processes and activities that enable DOE to safely and securely transport nuclear components and materials between research, manufacturing, testing, storage and disassembly facilities. Encompasses loading, and unloading weapons materials, as well as the installation, operation, and maintenance of the transportation equipment.
- Strategic Fuel Supply Management: Encompasses the processes and activities that allow DOE to manage the nation's actual strategic petroleum and fuel stockpiles- Strategic Petroleum Reserve, and Northeast Home Heating Oil Reserve. It Encompasses developing draw down scenarios and defining reserve capacity based on these scenarios.
- Toxic Waste Management: Encompasses the daily processes and activities performed to
 manage the inventories of stored nuclear, chemical, and biological waste, including handling
 waste containers at storage sites, long-term storage of waste, and regular monitoring and any asneeded treatment to ensure continued containment of volatile properties.
- Toxic Waste Transport: Encompasses the operational processes and activities that enable DOE to officially accept spent nuclear fuel and hazardous nuclear, chemical, and biological waste from power generation (e.g., utilities) facilities, and research and production sites, and safely transport it to storage facilities. Involves taking title to and physical possession of the waste; loading, and unloading waste casks; as well as the installation, operation, and maintenance of waste transportation equipment. Also includes the planning activities that precede any actual physical movement of waste, such as the selection of safe and approved transportation routes.

Mission Regulatory Development: Encompasses the development of the Mission focused types of regulations and policies that are central to DOE's core external facing programs. This Encompasses development of standards as well as guidelines that inform the regulation of specific industries.

• Energy Efficiency Standards Development: Encompasses the processes and activities DOE pursues to collaboratively develop and enforce energy efficiency standards with the private sector and other governmental organizations. The results of R&D efforts in energy efficiency are used to develop energy efficiency specifications and standards for various industries, appliances, vehicles, etc.

Mission Training: Encompasses the sub functions DOE undertakes to: 1.) develop training programs, including curriculum and course work, and 2.) deliver training for focused areas requiring specialized, technical skill sets. This training is outside the general, DOE employee development training that takes place as part of the Human Resources Management function.

- **Emergency Management Training:** Encompasses the processes and activities DOE performs to train its emergency response personnel. Includes designing training content and emergency response exercises, and training facility operators on operational safety best practices and policy to avoid and respond to incidents involving hazardous materials.
- Naval Reactor Training: Encompasses the processes and activities that the Navy performs to
 develop and evaluate training for safe operation for naval nuclear reactors and components. Also
 Encompasses the selection, training, qualification, and assignment of personnel who supervise,
 operate, and maintain naval reactors.
- **Nuclear Materials Detection Training:** Encompasses the processes and activities for training of customs officials at home and abroad to detect and prevent the illicit trafficking of nuclear and radiological materials and dual-use commodities used in weapons of mass destruction programs.
- Power Transmission and Distribution Training: Encompasses all processes and activities the DOE PMAs perform to train personnel on power transmission and distribution operations and maintenance topics and techniques.
- Safety And Security Training: Encompasses the design, development, and administration of
 professional training in safety and security for government personnel.

Non Proliferation: Encompasses the sub functions that allow DOE to limit or prevent the spread of materials, technology, or expertise relating to weapons of mass destruction; advance the technologies to detect the proliferation of weapons of mass destruction worldwide; and eliminate or secure inventories of surplus fissile materials and infrastructure usable for nuclear weapons, while working closely with its federal, international, and regional partners.

- **Dismantlement of Nuclear Weapons Stockpiles:** Encompasses processes and activities that eliminate inventories of domestic and foreign active and inactive nuclear weapons stockpiles that could be used to develop radiological dispersal devices.
- Downsizing of Nuclear Weapons Infrastructure: Encompasses the processes and activities to
 downsize the nuclear weapons production infrastructure in the US, and foreign nuclear partners,
 reorienting weapons research and production facilities and reactors toward commercial, nonmilitary applications. Encompasses efforts designed to redirect excess foreign nuclear weapons
 expertise and human capital to non-military, commercial, civilian endeavors.
- Fissile Materials Disposition: Encompasses the processes and activities that help establish a
 nuclear materials disposition strategy; develop and maintain nuclear materials disposal facilities;
 store spent fuel and surplus fissile materials pending disposition; dispose of surplus domestic and
 foreign plutonium; and convert domestic and foreign supplies of highly enriched uranium to low
 enriched uranium.

- Nuclear Materials Detection: Encompasses the processes and activities that leverage technologies for the detection of materials used for weapons of mass destruction. Encompasses border security activities such as developing and deploying radiological and nuclear detection equipment at key border crossings, airports, and ports, including at major seaports, or "megaports," worldwide,
- Nuclear Weapons Monitoring: Encompasses processes and activities that leverage technologies for the monitoring of nuclear explosions from testing activities, enabling the US's ability to monitor and assess the maturity of foreign nuclear weapons programs.
- Weapons Of Mass Destruction Information Control: Encompasses processes and activities to identify and prevent the release of documents and information related to technology needed to develop WMD.

Nuclear Weapons Stockpile Certification and Testing: Encompasses the sub functions that ensure the reliability and strike readiness of the U.S. inactive and active nuclear weapons stockpile and related components and materials.

- Stockpile Certification: Encompasses qualifying and validating technologies and components required to maintain and support the stockpile; the review and assessment of the operational readiness and security of nuclear weapons in the active and inactive stockpiles and the annual certification of the nuclear stockpile.
- Nuclear Weapons Testing: Encompasses the maintenance of the readiness to perform underground nuclear tests; the operation of the computing environment, simulation codes, and other advanced technologies to support weapons testing so as to not resort to underground testing.

Partnership Management: Encompasses the sub functions DOE performs to manage and specifically maintain its alliances with public and private sector organizations such as the coal industry, oil and gas companies, utilities, equipment manufacturers, universities, state and local governments, and other Federal agencies (e.g., DOE, EPA, etc.) to collaboratively develop, demonstrate, promote and deploy its programs (e.g, advanced energy technologies and processes).

- Defense Partnership Management: Encompasses the processes and activities to establish and maintain partnerships with DOD, weapons agencies of allied governments, external scientific. research, and development agencies, industry and academia related to defense technology, weapons research and design, materials development, and weapons safety, reliability and security.
- Energy Efficiency Partnership Management: Encompasses the processes and activities that identify, negotiate and promote technical cooperation projects with states and industry to jointly develop, demonstrate, promote, and deploy energy efficient technologies, practices, and standards.
- Environmental Partnership Management: Encompasses the processes and activities that DOE performs to manage and maintain partnerships with public and private sector partners to collaboratively develop, demonstrate, promote, and implement its environmental remediation and environmental safeguard and monitoring policies, programs, and technologies.
- Fossil Energy Partnership Management: Encompasses the processes and activities that DOE performs to manage and maintain its partnerships with the private sector (e.g., oil and gas companies, coal burning power plants, etc.) to collaboratively develop, demonstrate, promote. and deploy advanced, environmentally-friendly and efficient fossil fuel exploration, production, delivery, and consumption technologies and processes (e.g., clean coal technologies, carbon sequestration, etc.)

- **Nuclear Weapons Information Protection Partnership Management:** Encompasses processes and activities to manage and maintain partnerships with other Federal government agencies to protect classified nuclear weapon information from release.
- Renewable Energy Partnership Management: Encompasses the processes and activities that DOE performs to manage and maintain partnerships with its public and private sector partners to collaboratively develop, demonstrate, promote, and deploy its alternative and renewable energy policies, programs, and technologies.
- Scientific Research Partnership Management: Encompasses the processes and activities that
 DOE performs to manage and maintain partnerships with its public and private sector partners
 (universities, state and local governments, multinational corporations) to collaboratively engage in
 both basic and applied scientific research efforts and other endeavors that promote exploration,
 discovery, and dissemination of scientific knowledge.

Power Transmission and Marketing: Supports the marketing, sales, and transmission of reliable cost-based excess electrical power produced at Federal hydroelectric facilities.

- Power Marketing: This business function was assigned to the Power Marketing Administration through United States Code Title 42, Chapter 84 Subchapter III Section 7152 delegating and "Transfers from Department of the Interior", and United States Code Title 16 Chapter 12 Subchapter III. (e). "the power marketing functions of the Bureau of Reclamation" and the Army Corp of Engineers. The power marketing function encompasses all activities associated with the sales, preference in sales, contracting, and recovery of the sale of electric power and services from transmission and water projects. This business function also provides for regulatory compliance of FERC 888/889.
- Transmission: This business function was assigned through the Power Marketing Administration through Unites States Code Title 42, Chapter 84 Subchapter III Section 7152 "Transfers from Department of the Interior", United States Code Title 16 Chapter 12 Subchapter III. "The power marketing functions of the bureau of Reclamation including the construction, operation, and maintenance of transmission lines and attendant facilities" This business function also provides for regulatory compliance of FERC 888/889.
- Cost Recovery: This business function was assigned through United State Code, Title 16, Chapter 12, Subchapter III, Section 825s. The Power Marketing Administrations have the designated authority to collect revenue from the sales of transmission, using a cost based rate structure and sound business management practices.

Research and Development: Encompasses those sub functions that enable DOE to plan, sponsor, perform, and evaluate advanced, basic and applied scientific research. This includes development activities that encompass the fabrication of one-time instruments and component prototypes that are inputs into or byproducts of this research. Does not include technologies, processes, and components that can be produced or implemented on a wide-scale as described under the Engineering function.

- Basic Energy Sciences Research and Development: Encompasses the basic and applied scientific research processes and activities that discover and validate concepts for new and improved energy technologies and for understanding and mitigating the environmental impacts of energy use. Encompasses research in the natural sciences: emphasizing fundamental research in materials sciences including nanotechnology, chemistry, geosciences, and aspects of biosciences.
- **Biological and Environmental Sciences Research and Development:** Encompasses the academic scientific research processes and activities that discover and validate fundamental concepts in climate change, environmental remediation, genomics, proteomics, radiation biology, and medical sciences for improved energy production, development, and use.

- Cleanup Research and Development: Encompasses the applied scientific research processes and activities DOE performs to discover and validate concepts used to engineer decontamination technologies, processes, and techniques to be deployed for site cleanup, waste treatment and removal, and soil and water decontamination projects.
- Computational Sciences Research and Development: Encompasses the basic and applied scientific research processes and activities that discover and validate concepts in applied mathematics, computer science and high-performance networks, providing the high-performance computational and networking resources that are required for world leadership in science.
- Energy Efficiency Research and Development: Encompasses the applied scientific research processes and activities DOE performs to discover and validate concepts used for producing energy efficient technologies, processes, and standards for use in public and commercial buildings, homes, and appliances; industrial plant and equipment; power generation, transmission, storage, and distribution infrastructure; and vehicle power systems and components. Many times DOE will partner with private industry, states, and local organizations in its research efforts.
- Energy Transmission and Distribution Research and Development: Encompasses the applied scientific research processes and activities DOE performs to discover and validate concepts used to develop advanced energy transmission, and distribution technologies deployed to modernize the nation's electricity delivery infrastructure.
- Environmental Services Research and Development: Encompasses the applied scientific research processes and activities DOE performs to discover and validate concepts used to engineer technologies and processes used to mitigate and monitor the environmental and public health impact of DOE operations, implement and enforce environmental protection policies and practices at DOE facilities, and provide adequate emergency response capabilities.
- Fossil Fuel Research and Development: Encompasses the basic and applied scientific research processes and activities DOE performs to discover and validate concepts used to engineer efficient, reliable, production maximizing, and environmentally sound coal burning; and oil and gas exploration, drilling, processing, storage, delivery, and consumption technologies and processes (e.g., zero-emission power plant, clean coal technologies, and carbon sequestration techniques). Also included are collaborative research and development efforts that facilitate technology transfer.
- Fusion Energy Sciences Research and Development: Encompasses the basic and applied scientific research processes and activities that discover and validate concepts in advanced plasma science, fusion science, and fusion technology—the knowledge base needed for an economically and environmentally sustainable fusion energy source.
- High Energy Physics Research and Development: Encompasses the basic and applied scientific research processes and activities that explore and discover the laws of nature as they apply to the basic constituents of matter, and the forces between them. Specifically Encompasses research on elementary particles and their interactions.
- Naval Reactor Research and Development: Encompasses the applied scientific research processes and activities DOE performs to discover and validate concepts used to engineer technologies for naval reactors and their manufacturing processes.
- Non Proliferation Research and Development: Encompasses the applied scientific research processes and activities DOE performs to discover and validate concepts which guide the engineering of advanced technologies, components, and processes used in the development of devices for the detection of weapons of mass destruction, monitoring of nuclear testing. dismantlement of nuclear warheads, and other non proliferation efforts.

- Nuclear Energy Research and Development: Encompasses the applied scientific research and development processes and activities performed to discover and validate concepts used in the development of advanced non-Defense nuclear reactor technologies for next generation nuclear power plants and research facilities. Also includes the development of one-time radioisotope power systems used for space exploration and national security applications.
- Nuclear Physics Research and Development: Encompasses the basic and applied scientific research activities that discover and validate concepts in nuclear physics that help advance knowledge on the nature of matter and energy and develop the scientific knowledge, technologies and trained manpower that are needed to underpin DOE's missions for nuclear-related national security, energy, and environmental quality. Much of the research in this area is conducted using particle accelerators.
- Renewable Energy Research and Development: Encompasses the applied scientific research processes and activities DOE performs to discover and validate concepts used to engineer commercially viable technologies for use in the production, storage, delivery, and consumption of alternative and renewable energy sources.
- Security Research And Development: Encompasses the applied scientific research processes and activities DOE performs to discover and validate concepts used to enhance DOE security capabilities.
- Toxic Waste Disposition Research and Development: Encompasses the applied scientific research processes and activities DOE performs to discover and validate concepts used to engineer technologies, processes, and techniques that enable the handling, transportation, and permanent storage of the nation's radioactive, chemical, biological waste and spent nuclear fuel at waste storage facilities. Includes scientific studies focused on determining whether specific locations were ideal for a safe and environmentally sound geological waste disposal facility.
- Weapons Research and Development: Encompasses the applied scientific research processes and activities DOE performs to discover and validate concepts used to ultimately engineer new nuclear weapons technologies, components, assembly processes, and testing and evaluation methods.

Safety and Health: Encompasses the sub functions that enable DOE to develop, implement, and monitor technologies and policies that promote the safety and health of its workers and the general public, working or living near its facilities.

- Safety and Health Compliance: Encompasses the monitoring and analysis activities that help evaluate the impact of DOE's operations on the safety and health of its workforce and the general public, the results of which drive occupational and public safety and health policy development.
- Safety and Health Operations: Involves the implementation of safety and health practices at DOE facilities, ensuring compliance with DOE and Federal policies and regulations.

Site and Facility Remediation: Encompasses the sub functions that enable DOE to efficiently cleanup the radioactive and chemical contamination at its sites and facilities caused by Cold War-era defense and energy research, manufacturing, and testing operations, including liquid and solid waste removal and soil and water decontamination. Prepares sites for eventual disposition and/or transfer to local and state entities.

Facility Cleanup Operations: Encompasses the processes and activities that cleanup the chemical and radioactive contamination within physical DOE facilities and infrastructure, including structures and equipment.

- **Site Closure:** Encompasses the processes and activities that officially deactivate, decommission, and shut down remediated DOE facilities and sites, readying them for disposition and/or transfer to Federal, state, and local authorities.
- Soil Cleanup Operations: Encompasses the execution of decontamination processes and techniques that enable the cleanup of chemically and radioactively contaminated soil at nuclear weapons sites and facilities. Soil decontamination methods include, but are not limited to, soil removal and disposal in a specialized facility; on-site processing to remove contaminants; capping in place to prevent further contamination; and natural remedies such as using native plants to soak up contaminants.
- Waste Cleanup Operations: Involves the processes and activities that handle, alter the state of (e.g., burn), treat, and package solid and liquid chemical and radioactive waste for permanent disposal.
- Water Cleanup Operations: Encompasses the execution of decontamination processes and techniques that enable the cleanup of chemically and radioactively contaminated ground and surface water at nuclear weapons sites and facilities. Water decontamination methods include, but are not limited to, pumping water out of the ground, removing the contaminant and sending it back into the aquifer; and on site treatment.

Site and Facility Stewardship: Encompasses the sub functions that DOE performs to deactivate, oversee and maintain sites that have been cleaned up and deactivated. Encompasses continued monitoring to ensure permanent containment of radioactive and nuclear waste, as well as the actual transfer of cleaned up sites Federal, state, and local authorities.

- Asset Transfer: Encompasses the processes and activities that disposition formerly
 contaminated nuclear sites by transfer to other Federal civilian entities (e.g.; Bureau of Land
 Management), and state and local communities.
- Surveillance, Monitoring, and Maintenance: Encompasses the ongoing maintenance and monitoring of cleaned up legacy facilities and sites for recontamination or migration of contained waste.

GENERAL MANAGEMENT LOB FUNCTIONS AND SUB FUNCTIONS

Controls and Oversight: Controls and Oversight ensures that the operations and programs of the Federal government and its external business partners comply with applicable laws and regulations and prevent waste, fraud, and abuse.

Specifically, for DOE, the Controls and Oversight function involves assessing compliance, mandates, and program performance. The Department conducts independent evaluations of DOE line management and contractor performance in the areas of nuclear safeguards and security; environment, safety, and health; cyber security; emergency management and preparedness; and other critical functions as directed by the Secretary. Controls and Oversight also involves ensuring that DOE complies with security laws, regulations, and policies.

DOE exercises controls and oversight throughout its operations and programs to ensure reliability and compliance with those laws and regulations that govern DOE and its relationships. DOE conducts independent oversight and reviews of regulatory matters, analyses, and consultation to support field and project offices to demonstrate that DOE's safety and health programs meet regulatory statutes. It interfaces with other Federal regulatory agencies to ensure DOE facility safety policies and standards are consistent and represent best available information and technology.

• **Corrective Action:** Corrective Action involves the enforcement of activities to remedy internal or external programs that have been found non-compliant with a given law, regulation, or policy.

Specifically, for DOE, Corrective Action involves conducting reviews and audits of DOE programs, projects, tasks, or activities to determine their compliance with mandates; conducting independent assessments of the effective ness of DOE policies and programs; conducting self-assessments and other oversight actions; analyzing variance or noncompliance with mandates; recommending and following up on corrective actions; and performing follow-up reviews to ensure that corrective actions are implemented and effective.

Corrective Action also includes the involvement in the enforcement of the laws, regulations, and policies governing DOE and its constituent relationships in the stewardship of the resources over which DOE has been entrusted. The department participates in internal and external reviews and develops corrective action plans based on recommendations. Progress is monitored and measured for each set of actions. Includes actions taken to curtail or suspend operations when such operations result in undue environmental, health and safety risks.

• **Program Evaluation:** Program Evaluation involves the analysis of internal and external program effectiveness and the determination of corrective actions as appropriate.

At DOE, Involves conducting reviews of DOE programs, projects, tasks, and activities to determine their effectiveness; identifying and setting the performance and quality standards and measures used to evaluate the department's programs, projects, and tasks; identifying opportunities for cost savings and operational efficiencies; generating technical monitoring and evaluation reports; determining progress toward meeting goals and objectives using performance measures; evaluating achievements and milestones; conducting independent assessments of the effectiveness of DOE programs; conducting self-assessments and other oversight actions; analyzing results; identifying variances and problem areas; providing feedback on technical performance; reconciling costs; providing feedback on financial performance; and recommending and following up on corrective actions. It also involves evaluation of the effectiveness of DOE field element and program office efforts to monitor and assess performance of their safeguards and security, cyber security, emergency management, and environment, safety, and health programs. Quality Assurance supports program evaluation functions including conducting independent assessments of the effectiveness of policies and programs in safeguards and security; cyber security; emergency management; environment, safety, and health; and other areas of interest and conducting self-assessments and other oversight actions. Program Evaluation also involves evaluating department-wide security programs and determining if corrective actions are needed. Additionally, it involves providing recommendations on the safe, efficient, and reliable management of aircraft owned and used by DOE.

• **Program Monitoring:** Program Monitoring involves the data-gathering activities required to determine the effectiveness of internal and external programs and the extent to which they comply with related laws, regulations, and policies.

At DOE, Program Monitoring involves identifying and setting the performance and quality standards and measures used to evaluate programs, projects, and tasks; generating technical monitoring and evaluation reports; determining progress toward meeting goals and objectives using performance measures; evaluating achievements and milestones; conducting independent assessments of the effectiveness of programs; conducting self-assessments and other oversight actions; analyzing results: identifying variances and problem areas; track and report progress of performance measures; providing feedback on technical performance; reconciling costs; and providing feedback on financial performance. Other processes and activities include assessing the effectiveness of the program office monitoring of safeguards and security, cyber security, emergency management, and environment. safety, and health performance at sites and facilities for which it has responsibility. This may include gathering data and analyzing department-wide safeguards and security policy, standards, and procedures to determine the effectiveness of security programs. Quality Assurance (QA) is performed as a type of program monitoring activity, including definition of DOE and program performance measures, program guidance, policy, mandates, and procedures, and approved mandates and procedures are communicated throughout the affected organizations. In addition, QA establishes reporting hierarchy, roles, and responsibilities and empowers employees with rights and permissions to act in support of programs, projects, and tasks. The department also conducts peer reviews,

external audits, and customer, industry, and congressional reviews to ensure all programs and services are meeting expectations, regulations, and objectives. Program Monitoring also includes conducting studies, audits, assessments, and reviews of the use of aviation assets to ensure the safe and efficient management of the Department's aviation services and resources. It also monitors contractor activities at sites to ensure compliance with environmental, safety, and health regulations.

Internal Risk Management and Mitigation: Internal Risk Management and Mitigation involves all activities relating to the processes of analyzing exposure to risk and determining appropriate countermeasures.

At DOE, the Internal Risk Management and Mitigation sub function involves establishing security and safeguard, processes, procedures, & systems. It also involves ensuring DOE has the capability to continue essential functions across the spectrum of potential emergencies. Inspections and reviews are designed to evaluate line management performance; identify vulnerabilities from environment, safety, and health risks and threats to national security interests; and promote department-wide actions to mitigate and prevent their recurrence.

In the area of radiation protection standards for the public and the environment, the Department participates in national and international protection organizations, policy-setting organizations, and on risk management and standards-setting organizations. It develops policy and provides guidelines and tools to assist in the estimation of risk and risk management for protection of the public from radiation and other hazardous materials (HAZMAT).

• **Contingency Planning:** Contingency Planning involves the actions required to plan for, respond to, and mitigate damaging events.

At DOE, Contingency Planning involves developing and testing emergency response systems and plans, maintaining emergency response assets, and conducting security and safeguard evaluations and training. Contingency Planning also involves establishing an infrastructure that supports the devolution of authorities, responsibilities, and functions; safekeeping of vital resources and records; reliability of the transmission lines and systems; provision for emergency acquisition of resources; and the capability to perform work at alternate worksites. Inspections and assessments include ensuring that contingency plans are in place to support assignment of authority and responsibilities.

• **Continuity of Operations:** Continuity of Operations involves the activities associated with the identification of critical systems and processes, and the planning and preparation required to ensure that these systems and processes will be available in the event of a catastrophic event.

Within DOE, Continuity of Operation (COOP) involves developing and testing emergency response systems and plans, maintaining emergency response assets, and conducting security and safeguard evaluations and training. COOP also involves conducting Continuity of Government (COG) planning and monitoring the development and maintenance of viable departmental and regional COOP and COG programs to ensure COOP and COG missions and functions can be performed. COOP also involves the activities associated with the identification of critical systems, processes, equipment and vehicles (including DOE aircraft) and the planning and preparation required to ensure that they will be available in the event of a catastrophic event.

• **Service Recovery:** Service Recovery involves the internal actions necessary to develop a plan for resuming operations after a catastrophic event occurs.

At DOE, Service Recovery involves developing and testing emergency response systems and plans, maintaining emergency response assets, and conducting security and safeguard evaluations and training. The department provides oversight of departmental procedures to ensure DOE has the capability to activate operations, communicate, transport key personnel, continue operations, and recover normal operations.

Financial Assistance: Financial Assistance involves the provision of earned and unearned financial or monetary-like benefits to individuals, groups, or corporations

- **Direct Loans**: Direct Loans involve all disbursement of funds by the Government to a non-Federal borrower for a specific period of time, with a reasonable expectation of repayment. Such loans may or may not require the payment of interest.
- **Earmarked Grants:** Earmarked Grants involves the distribution of money to states or local governments for a named purpose or services.
- **Federal Grants (Non-State)**: Federal Grants encompasses the disbursement of funds by the Federal Government to a non-Federal entity to help fund projects or activities. This includes the processes and activities associated with grant administration, including the determination of grantee eligibility, the transfer of funds, and the oversight as appropriate.
- **Formula Grants:** Involves the allocation of money to states or their subdivisions in accordance with distribution formulas prescribed by law or administrative regulation, for activities of a continuing nature not confined to a specific project.
- Loan Guarantees: Loan Guarantees involve an arrangement in which the Federal Government pledges to provide payment for all or a part of the principal or interest on any debt obligation of a non-Federal borrower to a non-Federal lender.
- Project/Competitive Grants: Project/Competitive Grants involves the funding, for fixed or known
 periods, of specific state or local projects. Project/Competitive grants can include fellowships,
 scholarships, research grants, training grants, traineeships, experimental and demonstration grants,
 evaluation grants, planning grants, technical assistance grants, survey grants, and construction
 grants.

Legislative Relations: Legislative Relations encompasses the development, tracking, and amendment of public laws through the legislative branch of the Federal Government.

DOE Legislative Relations also involves activities aimed at the development, tracking, and amendment of public laws related to energy marketing, energy transmission operations and maintenance, environmental and safety laws, management and budget, and security.

 Congressional Liaison Operations: Congressional Liaison Operations involves all processes and activities associated with supporting the formal relationship between a Federal Agency and the U.S. Congress.

DOE Congressional Liaison Operations involves using the Department's mandates, procedures, mission-specific information, and achievements to develop policy and other positions that can be used to represent DOE; describing and explaining the content and benefits of DOE mission areas, positions, budgets, and progress to the Executive and Legislative branches; reviewing and coordinating DOE responses to Congress; preparing and giving speeches, presentations, and other outreach materials at public forums and other gatherings; developing informative and educational materials; targeting specific audiences for educational or informational activities; receiving, reviewing, and distributing comments and queries; and preparing, reviewing, approving, and communicating responses to comments and queries in collaboration with other departmental organizations. Congressional Liaison Operations also involves providing a liaison to Congress in areas that are directed at the protection of assets and providing assistance to Congress concerning the classification and declassification of DOE information.

Congressional Liaison Operations involves providing a liaison to Congress in the DOE mission and program areas. DOE supports energy legislation and Congressional information requests. DOE provides information and recommendations to the CEO for policy development and implementation and to provide information and assistance to Washington, DC, interests, including Congress, DOE, other Executive Branch agencies, and Washington, DC-based interest groups. DOE develops and maintains continuing relationships with other Federal agencies and Congressional delegations and committees. Senior managers from the Power Transmission and Marketing function are responsible

for maintaining an executive relationship with Congressional members and their respective staffs and DOE officials.

• **Legislation Testimony:** Legislation Testimony involves all processes and activities associated with providing testimony/evidence in support of, or opposition to, legislation.

For DOE, Legislation Testimony involves assessing legislation, regulations, policies, and directives to determine their impact on DOE's current and future missions, operations, and programs; using the Department's mandates, procedures, mission-specific information, and achievements to develop policy and other positions that can be used to represent DOE; describing and explaining the content and benefits of DOE mission areas, positions, budgets, and progress to the Executive and Legislative branches; preparing and giving speeches, presentations, and other outreach materials at public forums and other gatherings; developing informative and educational materials; targeting specific audiences for educational or informational activities; receiving, reviewing, and distributing comments and queries; and preparing, reviewing, approving, and communicating responses to comments and queries in collaboration with other departmental organizations. Special analyses or forecasts of energy issues may be prepared in response to requests by members of the Legislature. In addition, Legislation Testimony involves preparing and coordinating Congressional testimony and transcripts and responses to questions from OMB and Congress.

 Legislation Tracking: Legislation Tracking involves monitoring legislation from introduction to enactment.

At DOE, Legislation Tracking involves assessing legislation, regulations, policies, and directives to determine congressional reporting requirements and to assign and track preparation of reports. It involves monitoring the status of authorization, appropriation, and financial management legislation to assess potential impacts on DOE's current and future missions, operations, and programs. Legislation Tracking also involves providing legislative analysis and evaluation expertise. DOE tracks energy legislation and provides guidance to Customer Service Regions on legislative impacts.

• **Proposal Development:** Proposal Development involves drafting proposed legislation that creates or amends laws subject to Congressional action.

DOE may be called upon to draft proposed legislation that is forwarded through Congressional delegations and communicates the DOE position by creating legislation or amending current energy, national defense, or environmental cleanup and protection laws.

Judicial Activities: Judicial Activities Encompasses those sub functions relating to the administration of justice.

- **Judicial Hearings:** Judicial Hearings encompasses processes and activities associated with proceedings (usually by a court of law) where evidence is taken for the purpose of determining an issue of fact and reaching a decision based on that evidence.
- **Legal Investigation:** Legal Investigation involves processes and activities associated with gathering information about a given party (government agency, citizen, corporation) that would be admissible in a court of law in an attempt to determine a legal question or matter.
- **Resolution Facilitation:** Resolution Facilitation refers to those processes and activities outside a court of law, such as mediation and arbitration, that may be used in an attempt to settle a dispute between two or more parties (government agency, citizen, corporation).

Planning and Resource Allocation: Planning and Resource Allocation involves the determining of strategic direction, identifying and establishing programs and processes, and allocating resources (capital and labor) among those programs and processes.

At DOE, Planning and Resource Allocation encompasses execution and formulation of the Department's budget, development of strategic and workforce plans, development and implementation of Capital

Planning and Enterprise Architecture practices to plan and manage Departmental processes, resources and capital expenditures, establishing DOE's mission, goals, strategies and budget. It also involves planning and managing the allocation of resources and activities.

Budget Execution: Budget Execution involves day-to-day requisitions and obligations for agency expenditures, invoices, billing dispute resolution, reconciliation, service level agreements, and distributions of shared expenses.

DOE Budget Execution involves developing and issuing instructions and restrictions on use of funds: committing funds; obligating funds; gathering information from reporting offices; compiling and preparing budgets representing future spending for the Department; monitoring day-to-day funding requests; monitoring contracts for appropriate funding before they are issued; maintaining control levels; ensuring that control amounts, funding restrictions, and the like are not violated; analyzing uncosted obligations and unobligated amounts; receiving and validating invoices received from contractors, grantees, and vendors; and issuing payment instructions based on validated and approved invoices and other valid demands for payment. The Budget Execution sub function also supports acquisition activities by assisting in the determination of acquisition strategy and vehicles. and the defining of procurement requirements

DOE business units, such as program and staff offices and organizations maintain daily operations of their budget. Daily activities include: work authorizations, procurement requests, funds citations, requisitions, working capital fund activities, program direction funding, and the other daily requirements of reserving, obligating, and costing of appropriated funding. This includes reviewing quidance received from Budget Markup and Congress and initiating the budget execution. Daily processes and activities also involve requisitions and obligations for agency expenditures, invoices. billing dispute resolution, reconciliation, service level agreements, and distributions of shared expenses.

Budget Formulation: Budget Formulation involves all processes and activities undertaken to determine priorities for future spending and to develop an itemized forecast of future funding and expenditures during a targeted period of time. This includes the collection and use of performance information to assess the effectiveness of programs and develop budget priorities.

At DOE, Budget Formulation involves estimating employee and contractor personnel, funds, and physical resources; determining priorities for future spending; ensuring that budgets are explicitly tied to performance; identifying available resources, funds, employee, and contractor personnel; identifying required additional employee and contractor personnel, physical resources, and funds; reviewing funding guidance; assigning funding targets; making budget decisions; preparing budget narratives, justifications, and tables; incorporating performance measures; consolidating and verifying budget input; submitting budget requests; publishing and distributing budget requests and supporting data; defending budget requests through presentations, testimony, and supporting material; preparing budget appeals; negotiating programmatic issues and resource amounts; and finalizing budgets based on Congressional appropriations.

Capital Planning: Capital Planning involves the processes and activities for ensuring that appropriate investments are selected for capital expenditures.

DOE Capital Planning involves setting program objectives; defining courses of action to obtain the objectives; defining approaches to acquire the necessary financial and other resources; deciding which proposed capital projects to implement; defining capital project scope; identifying assumptions and constraints; examining the possibility and potential degree of loss, failure, threat, or other undesirable consequences associated with capital projects; determining the impact of identified risks on the capital project goals, strategies, budgets, and schedules; identifying the means for reducing risks; establishing critical paths, dependencies, and schedules; and providing capital/operating funds. Capital Planning involves analyzing and developing implementation strategies and plans for security and IT capital assets DOE-wide.

• **Enterprise Architecture:** Enterprise Architecture involves describing the current state and defining the target state and transition strategy for an organization's people, processes, and technology.

DOE Enterprise Architecture programs and practices involves defining the current and target states of DOE functions, processes, information, and technology as they relate to the DOE mission. It also involves developing a strategy to migrate the Department to the target state.

• **Management Improvement:** Management Improvement includes all efforts to gauge the ongoing efficiency of business processes and identify opportunities for reengineering or restructuring.

DOE Management Improvement involves assessing legislation, regulations, policies, and directives to determine their impact on DOE's current and future missions, operations, and programs; defining DOE business direction in support of the department's mission; identifying gaps and areas where restructuring is needed or policy and procedures requires revision; identifying desired outcomes for business lines and programs; setting business goals; conducting reviews and audits of programs or activities to determine satisfaction of business goals; conducting independent assessments of the effectiveness of policies and programs; conducting self-assessments and other oversight actions; analyzing variance and recommending corrective actions; and following up on corrective actions

• **Strategic Planning:** Strategic Planning entails the determination of annual and long-term goals and the identification of the best approach for achieving those goals.

At DOE, Strategic Planning involves developing short and long-term plans, goals, measures, policies, and guidance, defining DOE's business direction to implement its Department's mission and fulfill requirements, directives, initiatives, and legislative and regulatory requirements, This includes updating the Department's Strategic Plan and issuing annual guidance for 5 year program planning. This sub function also involves identifying gaps and areas where policy is needed or requires revision; evaluating program and project needs, goals, criteria and standards; identifying desired outcomes for lines of business, programs, projects, and tasks; setting business goals; establishing program requirements; defining program performance measures; defining, documenting, and obtaining concurrence and approvals on DOE and program guidance, policy, mandates, and procedures; communicating approved mandates and procedures throughout affected organizations; structuring functions based on mandates, missions, and goals; and establishing reporting hierarchy, roles, and responsibilities

• **Workforce Planning:** Workforce Planning involves the processes and activities for identifying the workforce competencies required to meet the agency's strategic goals and for developing the strategies to meet these requirements.

DOE Workforce Planning involves estimating employee resources, identifying available employee resources and their competencies, identifying required additional employee resources, reviewing funding guidance, assigning funding targets, making budget decisions, establishing a workforce planning process based on workforce data and classes, and developing and presenting workforce-restructuring plans.

Public Affairs: Public Affairs involves the exchange of information and communication between the Federal Government, citizens and stakeholders in direct support of citizen services, public policy, and/or national interest.

At DOE, the Public Affairs function involves communicating with stakeholders and customers to support the programs, projects, and activities and the exchange of information and communication between the Federal Government, news media, citizens, and stakeholders. Other activities include responding to queries, Freedom of Information Act (FOIA) requests, advocating the department through defining the mission and distributing information via public forums or in response to queries, and recognizing scientific achievements via nominations or selections for award in the specific field of research. DOE supports the exchange of information and communication between the Federal Government, news media, and citizens Also, public involvement staff ensures that views of interested and affected members of the public are considered in the development of new policies.

• **Customer Services:** Customer Services supports processes and activities associated with providing an agency's customers with information regarding the agency's service offerings and managing the interactions and relationships with those customers.

DOE Customer Services involves using DOE's mandates, procedures, mission-specific information, and achievements to develop policy and other positions that can be used to represent DOE; describing and explaining the content and benefits of program mission areas, positions, budgets, and progress to the public, media, and Executive and Legislative branches; preparing and giving speeches, presentations, and other outreach materials at public forums, international meetings, and other gatherings; developing informative and educational materials; targeting specific audiences for educational or informational activities; distributing informative or educational materials; receiving, reviewing, and distributing comments and queries; preparing, reviewing, approving, and communicating responses to comments and queries in collaboration with other departmental organizations and contractors; identifying candidates for scientific, technical, departmental, and other awards; selecting awardees in collaboration with internal and external reviewers; issuing scientific and other achievement awards; sponsoring, arranging, and executing media events; and sponsoring, arranging, and executing public interest competitive events, meetings of energy interest groups, and other forums. Customer Service also involves training and awareness for safeguards and security.

Customer Services involves the support of OASIS and all of the related market facing functions, wheeling, and the high-availability and reliability of transmission services. In addition, DOE supports the customer service billing and financial collection. DOE develops and maintains services for direct response to public inquiries and mailings to mass audiences, including devices such as the toll-free telephone lines, public release planning, public meeting calendar, public comment log, and mass mailings.

• Official Information Dissemination: Official Information Dissemination includes all efforts to provide official government information to external stakeholders through the use of various types of media, such as video, paper, web, etc.

At DOE, Official Information Dissemination involves the design and implementation of DOE web sites for dissemination of information; responding to external requests for information on project performance, management concepts, policies and status from the National Academies, Defense Nuclear Facilities Safety Board, OMB, and other executive or legislative offices; and managing Departmental Freedom of Information Act and Privacy Act activities and timely responses for requested documents under the Acts. This also involves the management of DOE official documents, actions, decisions, including classified material, for the Secretary, Deputy Secretary, and Under Secretaries. In addition, this function involves the preparation of written history of the Department, its predecessor agencies, and its programs to ensure compliance with the National Historic Preservation Act and other cultural resources statues.

DOE uses multiple vehicles for information dissemination; writes and produces brochures, newsletters, speeches and news releases; writes articles for external publications; prepares talking points and bulletins on hot issues; and produces photo, graphics, printing, and video production. This includes presentations by management and appearances by staff at technical "fairs" or other events in an effort to better communicate with external stakeholders.

• **Product Outreach:** Product Outreach relates to the marketing of government services products, and programs to the general public in an attempt to promote awareness and increase the number of customers/beneficiaries of those services and programs.

DOE Product Outreach involves developing and promoting programs to enhance customer awareness and participation (e.g., Super Good Cents homes, Energy Smart appliances, and conservation). DOE also has marketing functions to develop products and services, establish prices and contracts and recommend rates, and create and maintain the business interface with customers.

• **Public Relations:** Public Relations involves the efforts to promote an organization's image through the effective handling of citizen concerns.

At DOE, the Public Relations sub function involves providing responses and supporting information related to executive correspondence and queries addressed to the Secretary, Deputy Secretary and Under Secretaries and Departmental organizations. The Public Relations processes and activities include arranging, coordinating, and executing site tours and other media events. Other activities include explaining the position and benefits of programs and budgets in public forums and professional societies. Preparing, publishing, and making readily available newsletters, articles, op-ed pieces, Web pages, and brochures to all potential audiences also are part of this sub function. In addition, DOE Public Relations releases information to the public regarding national security threats or concerns. DOE delivers high-quality communication products and services to external groups in a timely, accurate, and complete manner.

Regulatory Development: Regulatory Development involves processes and activities associated developing regulations, policies, and guidance to implement laws.

At DOE, Regulatory Development involves processes and activities associated with developing, promulgating, and interpreting policies, procedures, and guidance related to management, budget, procurement, Human Resources, safeguards and security. DOE facilitates and participates in the development of Federal Register Notices and the Code of Federal Regulations (CFR). DOE is responsible for providing policy and strategic guidance to ensure appropriate public involvement in the formulation of regional power policies, providing leadership and direction, and establishing the policies through which national goals for electric power use and development are achieved.

• **Policy and Guidance Development:** Policy and Guidance Development involves the creation and dissemination of guidelines to assist in the interpretation and implementation of regulations.

At DOE, Policy and Guidance Development encompasses the analysis of existing and proposed policies, procedures, and processes generated internally and externally. Development of policies, procedures, and processes, including regulations, orders, guides, and technical standards, are also carried out under this sub function, which also covers a wide range of technical, scientific, business management, and facility management functions. Policy and Guidance Development also involves the creation and dissemination of guidelines to assist in the interpretation and implementation of regulations related to management, budget, finance, procurement, human resources, and safeguards and security. DOE facilitates and participates in the development of Federal Register Notices and the Code of Federal Regulations. DOE is responsible for providing policy and strategic guidance to ensure appropriate public involvement in the formulation of regional power policies; providing leadership and direction; and establishing the policies through which national goals for electric power use and development are achieved. DOE also advises and consults with energy utility companies to interpret and best implement existing and proposed regulations regarding nuclear power.

• **Public Comment Tracking**: Public Comment Tracking involves the processes and activities of soliciting, maintaining, and responding to public comments regarding proposed regulations.

DOE Public Comment Tracking includes seeking public comment and tracking of the Federal Register Notices regarding actions that support the power transmission and marketing activities and develops and maintains services for direct response to public inquiries and mailings to mass audiences, including devices such as the toll-free telephone lines, public release planning, public meeting calendar, public comment log, and mass mailings.

 Regulatory Creation: Regulatory Creation involves the activities of researching and drafting proposed and final regulations.

Regulatory Creation involves researching and drafting proposed and final regulations that reflect DOE mission and policies. This includes analysis of existing and proposed policies, procedures, and processes, including those generated internally and externally. Development of policies, procedures, and processes including regulations, orders, guides, and technical standards are also carried out under this sub function, which also covers a wide range of technical, scientific, business management, and facility management functions. This sub function also includes the creation, management, and termination of Department-wide advisory committees in accordance with the

Federal Advisory Committee Act (FACA) and implementing regulations. In addition, DOE participates in the activities of researching and drafting proposed marketing plans and policies in support of power and transmission marketing activities.

• **Rule Publication:** Rule Publication includes the all activities associated with the publication of a proposed or final rule in the Federal Register and Code of Federal Regulations.

DOE develops and publishes rules for medical standards for human reliability programs. For example, the Department wrote the Beryllium Prevention Rule and the Radiation Protection Rule, published them in the Federal Register, tracked public comments, and wrote the final rules. DOE participates in all activities associated with the publication of a proposed or final marketing plan and rates regarding statutory responsibilities.

Revenue Collection: Revenue Collection includes the collection of Government income from all sources. Excludes revenue from tax collection.

At DOE, Revenue Collection includes government income that is earned as a result of services rendered or products that are sold by a program office.

 Debt Collection: Debt Collection supports processes and activities associated with the collection of money owed to the U.S. government from both foreign and domestic sources.

DOE business units are responsible for agency cash management activities, which include cash flow forecasting, funds control, assessing and settling of penalty bills, reimbursable billings and collections, and U.S. Treasury transactions and services. DOE collects debt from customers that have been issued and provisioned with services.

• **Federal Asset Sales:** Federal Asset Sales encompasses the processes and activities associated with the acquisition, oversight, tracking, and sale of non-internal assets managed by the Federal Government with a commercial value and sold to the private sector.

At DOE, Federal Asset Sales encompass processes and activities associated with the acquisition, oversight, tracking, and sale of non-internal assets managed by the Federal Government with a commercial value and sold to the private sector. DOE is occasionally engaged in acquisition of assets, such as land, and equipment that require oversight, tracking, and sale in order to support business activities. This includes the sale or disposition of personal property under the control of DOE's Facilities Management contractors and approval for the acquisition and disposal of DOE aviation assets. Federal Asset Sales also includes the sale of radioactive isotopes for medical, scientific, and commercial purposes as part of the isotopes program.

User Fee Collection: User fee collection involves the collection of fees assessed on individuals or
organizations for the provision of Government services and for the use of Government goods or
resources (i.e. National Parks).

At DOE, User Fee Collection includes the collection of fees (e.g., one mil (one-tenth of a cent) per kilowatt-hour of nuclear-generated electricity) from utilities for nuclear waste management and disposal of spent nuclear fuel.

Administrative Management: Administrative Management involves the day-to-day management and maintenance of the internal infrastructure.

DOE Administrative Management function involves managing physical resources, providing facility services, establishing security, and managing employees and information technology resources. Administrative Management also provides support, guidance, and response to daily management and maintenance of the department's infrastructure. Also includes determining travel needs and providing justification for such trips, managing facilities and office equipment, developing workforce requirements, evaluating staff performances, providing training tools, determining where staff is most needed at specific locations, and the process of posting vacancies and selecting candidates.

• Facilities, Fleet, and Equipment Management: Facilities, Fleet, and Equipment Management involves the maintenance, administration, and operation of office buildings, fleets, machinery, and other capital assets that are possessions of the Federal Government.

DOE Facilities, Fleet, and Equipment Management involves designating use of and responsibility for facilities, buildings, equipment, vehicles, and grounds to departmental elements; allocating furniture, computers, communications, and other equipment and supplies; accepting delivery of equipment and other physical resources from vendors, suppliers, and contractors; conducting regular inventories of physical resources to determine number, location, condition, status, and other relevant factors; and disposing of excess buildings, equipment, vehicles, and other physical resources. Other activities include determining facility requirements for headquarters and processing requests such as the need for electricity, telephone or data lines, furniture, and other infrastructure items. Maintaining inventories and overseeing moves of equipment are also part of this sub function. It also includes providing all services necessary to ensure functional, safe, and pleasant working environments in office facilities owned or leased by DOE. Specific services include: space design and layout, furniture acquisition, facility operation, maintenance, and alteration. Additional activities include inventory management and warehouse operations; management of materials, equipment (including equipment loan pool), and spare parts inventories; traffic management; warehouse/field receiving and inspection services; storage; issuance; shipping; transportation; fleet management; asset utilization and disposal; hazardous waste management; and property management necessary to support the development, maintenance, and reliability of the interconnected transmission system.

Help Desk Services: Help Desk Services involves the management of a service center to respond
to government and contract employees' technical and administrative questions.

DOE Help Desk Services involves the management of a service center to respond to government and contract employees' technical and administrative questions. Help Desk Services include deploying and supporting information systems and information technology infrastructure. DOE provides employee technical support and external customer service support. This includes all activities associated with telephone troubleshooting, call tracking, dispatching desktop client support technicians to specific client sites, notifications and alerts, scheduling, and providing over-the-phone assistance. Help Desk Services are also provided to assist customers with administrative matters such as building repair and maintenance requests, cleaning services and answering questions regarding services provided by the organization.

• **Security Management:** Involves the physical protection of an organization's personnel, assets, and facilities (including security clearance management). Note: Activities related to securing data and information systems is addressed under the "IT Security" Sub-function.

DOE Security Management involves personnel, information, technical, and overarching security. This includes conducting reviews to determine compliance with security-related mandates; conducting independent assessments of the effectiveness of policies and programs in safeguards and security; conducting security and safeguard evaluations; maintaining information on visits and assignments by foreign nationals to DOE facilities and sites; and granting, maintaining, and terminating permission to employees and contractors for physical access to facilities and equipment. DOE assists offices and organizations in achieving adequate security to meet their particular risks and needs, evaluates and recommends improvements in the line security program performance, secures contract support, and implements security program measures.

• **Travel:** Travel involves the activities associated with planning, preparing, and monitoring of business related travel for an organization's employees.

DOE Travel includes establishing critical paths, dependencies, and schedules; defining and approving domestic and foreign trips and travel requirements; and making travel arrangements to include travel documents and reservations for hotels, airlines, and vehicles. Travelers and administrative staff must be briefed on the travel regulations and use of the Travel Manager System to prepare all necessary travel authorizations and vouchers. Other activities include prioritization of

trips requested by staff and providing authorization. Travel arrangements are made for the individuals, and justifications and expense reports are also processed as part of this task. Travel also includes support for DOE Foreign Visits and Assignments and Foreign Travel Programs.

• Workplace Policy Development and Management: Workplace Policy Development and Management includes all processes and activities required to develop and disseminate workplace policies such as dress codes, time reporting requirements, telecommuting, etc.

Policy focus includes human relations, diversity and equal employment opportunities, security, safety, and contracting and property management.

Financial Management: Financial Management involves the use of financial information to measure, operate and predict the effectiveness and efficiency of an entity's activities in relation to its objectives. The ability to obtain and use such information is usually characterized by having in place policies, practices, standards, and a system of controls that reliably capture and report activity in a consistent manner.

At DOE, Financial Management function involves establishing budgets, managing funds and procurements, and assessing program performance. This includes providing accounting policy, general ledger, cash management, cash forecasting, and disbursement operations; all departmental, OMB, and Treasury reporting; and plant investment and property management policy planning, cash management analysis, financial planning, and other assistance in support of decision-making. It also includes identifying and analyzing the short- and long-term budgetary impacts associated with changes in policies, programs, and contractual agreements; identifying and assessing projected risk and financial effects of economic and customer marketing conditions, OMB direction, legislation, and policy decisions; providing economic and analytical support for rate case and regulatory proceedings; analyzing and preparing all regulatory and Federal budget reporting; coordinating and executing all Treasury and non-Federal financing programs; maintaining Official Statements; and developing capital investment policies to ensure efficient and effective capital acquisitions. This function also has primary responsibility for relationships with the Federal and non-Federal banking communities, rating agencies, investors, and others in the financial community.

• Accounting: Accounting entails accounting for assets, liabilities, fund balances, revenues and expenses associated with the maintenance of Federal funds and expenditure of Federal appropriations (Salaries and Expenses, Operation and Maintenance, Procurement, Working Capital, Trust Funds, etc.) in accordance with applicable Federal standards.

At DOE, Accounting reports on expenses, revenues, and capital items in accordance with generally accepted accounting principles. It is responsible for accurate and timely recording of business transactions; issuing financial statements and other financial reports; and operating and maintaining a comprehensive, integrated corporate business planning, accounting, and reporting system to promote financial integrity and ensure the integrity of financial information. Accounting activities for the Department includes payroll accounting, travel accounting, cash management, contractor oversight, and administrative control of funds; payroll services; authorizing, tracking and reporting the expenditures related to public-private competitions and monitoring the savings that accrue to the Department from completed competitions. In addition, DOE accounting systems support a detailed fiscal analysis regarding revenue collection, revenue generation, and repayment schedules to other government agencies and external customers.

• **Asset and Liability Management**: Assets and Liability Management provide accounting support for the management of assets and liabilities of the Federal government.

DOE develops debt and investment management policies and strategies and develops and maintains a portfolio of financing options and methodologies, both Federal and non-Federal, in support of strategic business initiatives. DOE coordinates borrowing plans with the U.S. Treasury and develops the amortization plan for actual repayments to the U.S. Treasury; develops and implements short-term and long-term borrowing plans and investment management plans; maintains contacts with banking, rating agency, and investor groups; maintains all financing management; establishes, maintains, and administers plant investment and property management financial policy, financial

accountability, and record systems; maintains and validates priced inventories of real and personal property to support cost of service studies, rate case, and financial statements; maintains depreciation records; and prepares costs studies and methodologies to distribute costs to products and services to support the development of an integrated margin management information system.

Budget and Finance: Budget and Finance addresses the management of the Federal budget
process, including the development of plans and programs, budgets, and performance outputs and
outcomes as well as financing Federal programs and operations through apportionment of direct and
reimbursable spending authority, fund transfers, investments and other financing mechanisms.

For DOE, Budget and Finance includes analysis to ensure compliance with OMB and Departmental directives, and for sound management and stewardship of the Department's financial resources. Budget and Finance involves setting program objectives; defining the course of action to obtain objectives; defining an approach to acquire the necessary financial and other resources; deciding which proposed programs and projects to implement; setting work program priorities; defining program and project scope; identifying assumptions and constraints; examining the possibility and potential degree of loss, failure, threat, or other undesirable consequences associated with programs and projects; determining the impact of identified risks on the program or project goals, strategies, budgets, and schedules; identifying the means for reducing risks; specifying tasks; assigning persons, employees, resources, and services needed to implement tasks; and establishing critical paths. dependencies, and schedules. The Budget and Finance sub function also includes estimating employee and contractor personnel, funds, and physical resources; identifying available resources, funds, employees, and contractor personnel; identifying required additional employee and contractor personnel, physical resources, and funds; reviewing funding guidance; assigning funding targets; making budget decisions; preparing budget narratives, justifications, and tables; incorporating performance measures; consolidating and verifying budget input; submitting budget requests; publishing and distributing budget requests and supporting data; defending budget requests through presentations, testimony, and supporting material; preparing budget appeals; negotiating programmatic issues and resource amounts; and finalizing budgets based on Congressional appropriations. Activities include the development and presentation of budgets; bringing policy, business unit funding, and full-time equivalent (FTE) issues that arise in the budget formulation processes to executive management for resolution; and assisting management in addressing funding and staffing levels that affect DOE's ability to meet cost management, rates, competitiveness, and other strategic objectives. DOE supports projects with alternative sources of funding.

 Collections and Receivables: Collections and Receivables includes - deposits, fund transfers, and receipts for sales or service.

At DOE, Collections and Receivables includes receiving and reconciling allotments and receiving and allocating funds available from collections, investments, and refunds and collections from other Government accounts. DOE provides agency cash management activities, which include cash flow forecasting, funds control, assessing and settling of penalty bills, reimbursable billings and collections, and U.S. Treasury transactions and services. DOE supports account collection and receivables through electronic draft, lock box, and credit card transactions. Enforcement of collections is supported through contract management and legal services.

Payments: Payments include disbursements of Federal funds, via a variety of mechanisms, to
Federal and private individuals, Federal agencies, state, local and international Governments, and the
private sector, to effect payment for goods and services, or distribute entitlements, benefits, grants,
subsidies, loans, or claims.

The Payments sub function at DOE includes validating invoices received from contractors, grantees, and vendors and issuing payment instructions based on validated and approved invoices and other valid demands for payment. DOE has several repayment agreements and schedules with many of its stakeholders, which include other Federal agencies, employees, and vendors. DOE processes accounting transactions, which record business activity in a timely and businesslike manner, as well as provide employee travel payments, training and support, and payroll functions; provides adequate and auditable processes, systems, and procedures to ensure compliance with regulatory

requirements, agency policy, and compliance with disbursement policy; develops functional requirements for automated system development; ensures that disbursements are in accordance with contract terms and conditions and obligation processing and reporting is timely and accurate; and maintains vendor files and performs required annual reporting on payments to vendors.

• **Reporting and Information:** Reporting and Information includes providing financial information, reporting and analysis of financial transactions.

DOE Reporting and Information involves analyzing uncosted obligations and unobligated amounts; receiving and validating invoices received from contractors, grantees, and vendors; reconciling costs for program organizations; identifying variances in planned versus actual costs; and providing feedback on financial performance. DOE's offices and organizations that are revenue generating are required to maintain financial information, reports, and analysis of its calculated financial transactions for auditing purposes. Activities include corporate business planning, budgeting, and reporting information that assists managers in controlling costs in order to increase competitiveness and improve financial integrity. This includes providing accounting and reporting for the FCRPS, including accounting policy, general ledger, cash management, cash forecasting, and disbursement operations and reporting.

Human Resource Management: Human Resource Management involves all processes and activities associated with the recruitment and management of personnel.

At DOE, the Human Resource Management function involves managing employees, including all activities associated with personnel staffing, manpower, diversity, and organizational activities and initiatives. Activities include strategic human resource management, which addresses workforce diversity and performance management issues, culture change initiatives, and administration of DOE's diversity, EEO Title VI and VII compliance programs, harassment-free-workplace policies, alternative dispute resolution processes, and labor relations programs. Oversight responsibilities include: legislative and regulatory analysis, with applicability determination for DOE; development of standards of human resource organizational performance; measuring and evaluating program results; and use of nondiscrimination and other laws and applicable rules to ensure that all employment decisions are made in accordance with all applicable laws and rules. Policy strategies address both current and future organizational needs, labor market and workforce demographics, and workforce capabilities in order to build and sustain DOE's competitive advantage.

- **Benefits Management:** Designs, develops, and implements benefit programs that attract, retain and support current and former agency employees. This sub-function includes: establishing and communicating benefits programs; processing benefits actions; and interacting as necessary with third party benefits providers.
- Compensation Management: Designs, develops, and implements compensation programs that
 attract, retain and fairly compensate agency employees. In addition, designs, develops, and
 implements pay for performance compensation programs to recognize and reward high performance,
 with both base pay increases and performance bonus payments. This sub-function includes:
 developing and implementing discretionary, alternative, and non-discretionary compensation
 programs; administering bonus and monetary awards programs; administering pay changes;
 managing time, attendance, leave and pay; and managing payroll.
- Employee Development and Performance Management: Designs, develops, and implements a comprehensive employee development approach to ensure that agency employees have the right competencies and skills for current and future work assignments. Designs, develops, and implements a comprehensive performance management strategy that enables managers to make distinctions in performance and links individual performance to agency goal and mission accomplishment. This subfunction also includes conducting employee development needs assessments; designing employee development (e.g., training) programs; administering and delivering employee development programs; managing employee performance; and evaluating the overall effectiveness of the agency's employee development approach.

At DOE, providing professional training opportunities for specialized program needs such as Counterintelligence. Also, includes providing awareness training to DOE personnel to increase awareness of security, counterintelligence, safety, and other issues and events.

• Employee Relations: Designs, develops, and implements programs that strive to maintain an effective employer-employee relationship that balance the agency's needs against its employees' rights. This sub-function includes: addressing employee misconduct; addressing employee performance problems; managing administrative grievances; providing employee accommodation; administering employees assistance programs; participating in administrative third party proceedings; and determining candidate/employee suitability based on information collected outside of the HR process (e.g., background investigation, drug testing, etc.).

At DOE, involves conducting Counterintelligence-based eligibility evaluations of all personnel in high risk programs, assessing the results of Counterintelligence-scope polygraph examinations, and reviewing personnel security files.

- HR Strategy: Develops effective human capital management strategies to ensure federal organizations are able to recruit, select, develop, train, and manage a high-quality, productive workforce in accordance with merit system principles. This sub-function includes: conducting both internal and external environmental scans; developing human resources and human capital strategies and plans; establishing human resources policy and practices; managing current and future workforce competencies; developing workforce plans; developing succession plans; managing the human resources budget; providing human resources and human capital consultative support; and measuring and improving human resources performance.
- Labor Relations: Manages the relationship between the agency and its unions and bargaining units. This includes negotiating and administering labor contracts and collective bargaining agreements; managing negotiated grievances; and participating in negotiated third party proceedings.
- Organization and Position Management: Designs, develops, and implements organizational and position structures that create a high-performance, competency-driven framework that both advances the agency mission and serves agency human capital needs.
- **Separation Management:** Conducts efficient and effective employee separation programs that assist employees in transitioning to non-Federal employment; facilitates the removal of unproductive, non-performing employees; and assists employees in transitioning to retirement.
- Staff Acquisition: Establishes procedures for recruiting and selecting high-quality, productive employees with the right skills and competencies, in accordance with merit system principles. This sub-function includes: developing a staffing strategy and plan; establishing an applicant evaluation approach; announcing the vacancy, sourcing and evaluating candidates against the competency requirements for the position; initiating pre-employment activities; and hiring employees.

Information and Technology Management: Involves the coordination of information and technology resources and systems required to support or provide a service.

At DOE, the Information and Technology Management function involves managing information and technology resources, providing information technology governance, planning, and standards for the agency's general business activities. Technical and strategic leadership is provided for project offices and for the contractors that provide IT services

• **Information Management:** Information Management involves the coordination of information collection, storage, and dissemination, and destruction as well as managing the policies, guidelines, and standards regarding information management.

The DOE Information Management sub function involves tracking, storing, retrieving, and distributing information; developing and implementing measures to protect information; establishing information structures; designing and building or acquiring information systems; deploying and supporting

information systems; designing and acquiring computing and communications hardware, operating system software, and communications software; deploying and supporting the information technology infrastructure; and designing, acquiring, deploying, and supporting technical and information resources.

- IT Infrastructure Maintenance: IT Infrastructure Maintenance involves the planning, design, and maintenance of an IT Infrastructure to effectively support automated needs (i.e. platforms, networks, servers, printers, etc.).
- **IT Security:** IT Security involves all processes and activities pertaining to the securing of Federal data and systems through the creation and definition of security policies, procedures and controls covering such services as identification, authentication, and non-repudiation.

At DOE, IT Security involves developing and implementing measures to protect information and information systems; conducting reviews and audits of information systems and management procedures to determine their compliance with mandates; conducting independent assessments of the effectiveness of policies and programs in IT security; conducting self-assessments and other oversight actions; analyzing variance or noncompliance with mandates; recommending corrective actions; following up on corrective actions; identifying and recording incidents; investigating incidents; recommending or establishing actions to take as a result of the investigation; assessing training needs; delivering training services; and evaluating employee performance.

- **Lifecycle/Change Management:** Lifecycle/Change Management involves the processes that facilitate a smooth evolution, composition, and workforce transition of the design and implementation of changes to agency resources such as assets, methodologies, systems, or procedures.
- Life-Cycle/Change Management: Life-Cycle/Change Management involves developing measures to protect information; identifying information required to be retained; establishing information structures; designing and building or acquiring information systems; deploying and supporting information systems; designing and acquiring computing and communications hardware, operating system software, and communications software; deploying and supporting the information technology infrastructure; designing, acquiring, deploying, and supporting technical and information resources; assessing training needs; delivering training services; and evaluating employee performance. DOE develops, maintains, and operates software change management procedures for enterprise systems; develops, maintains, and enhances automated tests that ensure the validity and performance of existing enterprise systems, enhancements, and new releases; and provides load, stress, and qualitative testing services to the business lines. DOE organizations provide life-cycle and change management activities for the business line technology assets.
- **Records Management:** Records Management involves the operations surrounding the management of the official documents and records for an agency.
 - DOE Records Management involves tracking, storing, retrieving, and distributing documents; developing and implementing measures to protect information; identifying information required to be retained as records; determining and complying with record retention schedules and requirements; disposing of records; establishing information structures; designing and building or acquiring information systems; deploying and supporting information systems; and designing, acquiring, deploying, and supporting technical and information resources. DOE also has manual and electronic records and forms management technologies that provide services for official records storage and retrieval; records consultations; records disaster recovery; and compilation, coordination, and dissemination of DOE and other Governmental directives or orders. These activities include efforts to inform employees of their RIDS responsibilities, ensure that appropriate documents are retained, and shipping them, if appropriate, to the correct location for storage or eventual destruction.
- **System Development:** System Development supports all processes and activities associated with the in-house design and development of software applications.

DOE System Development involves identifying information required to be processed and retained; establishing information structures; designing and building or acquiring information systems; deploying and supporting information systems; designing and acquiring computing and communications hardware, operating system software, and communications software; deploying and supporting the information technology infrastructure; designing, acquiring, deploying, and supporting technical and information resources; assessing system training needs; delivering system training services; and evaluating employee performance regarding delivered training. Activities include responsibility for data and software application products and services for the business systems and data and software applications. Responsibilities also include systems analysis, database design, application development, and technical and user documentation.

System Maintenance: System Maintenance supports all activities associated with the maintenance of in-house designed software applications.

At DOE, System Maintenance involves supporting information systems; operating system software, and communications software.

Supply Chain Management: Supply Chain Management involves the purchasing, tracking, and overall management of goods and services.

DOE Supply Chain Management involves managing procurements, physical resources, and employees and determining strategies and work programs. DOE provides integrated and cohesive logistics support to include procurement of construction and professional and nonprofessional services; procurement of materials; inventory management and warehouse operations; management of materials, equipment (including equipment loan pool), and spare parts inventories; traffic management; warehouse and field receiving and inspection services; storage; issuance; shipping; transportation; fleet management; asset utilization and disposal; hazardous waste management; and property management necessary to support the development, maintenance, and reliability of an interconnected transmission system.

Goods Acquisition: Goods Acquisition involves the procurement of physical goods, products, and capital assets to be used by the federal government.

At DOE, Goods Acquisition involves determining a goods acquisition strategy and vehicle; defining procurement requirements: defining the selection approach and criteria: developing solicitations: issuing requests to vendors, contractors, and other providers; receiving, logging, and acknowledging submissions; evaluating and ranking submissions against selection criteria; selecting awardees; notifying vendors, contractors, and other providers of final disposition of their submissions; reaching agreement with other parties on work to be accomplished, goods and services to be delivered, or obligations of the parties; identifying the roles and responsibilities of each party; executing, modifying, and retiring contracts and agreements; and handling procurement appeals.

Inventory Control: Inventory Control refers to the tracking of information related to procured assets and resources with regards to quantity, quality, and location.

DOE Inventory Control involves designating the use of and responsibility for facilities, buildings, equipment, vehicles, and grounds to departmental elements; allocating furniture, computers, communications, and other equipment and supplies; accepting delivery of equipment, vehicles, and other physical resources from vendors, suppliers, and contractors; conducting regular inventories of physical resources to determine number, location, condition, status, and other relevant factors; and disposing of excess buildings, equipment, vehicles, and other physical resources.

Logistics Management: Logistics Management involves the planning and tracking of personnel and their resources in relation to their availability and location.

At DOE, Logistics Management involves defining an approach to acquire the necessary financial and other resources; assigning persons, employees, resources, and services needed to implement tasks: establishing critical paths, dependencies, and schedules; providing facility and site maintenance

services; providing utilities; providing telecommunication services; distributing office space; organizing, scheduling, and executing moves; designating the use of and responsibility for facilities, buildings, equipment, vehicles, and grounds to departmental elements; allocating furniture, computers, communications, and other equipment and supplies; defining and approving travel requirements; and making travel arrangements including travel documents and reservations for hotels, airlines, and vehicles.

Services Acquisition: Services Acquisition involves the oversight and/or management of contractors and service providers from the private sector.

At DOE, Services Acquisition involves determining an acquisition strategy and vehicle for contracted services; defining procurement requirements; defining the selection approach and criteria; developing solicitations; issuing requests to vendors, contractors, and other providers; receiving, logging, and acknowledging submissions; evaluating and ranking submissions against selection criteria; select awardees: notifying vendors, contractors, and other providers of final disposition of their submissions: reaching agreement with other parties for work to be accomplished, goods and services to be delivered, or obligations of the parties; identifying the roles and responsibilities of each party; executing, modifying, and retiring contracts and agreements; and handling procurement appeals. DOE reviews and analyzes legal, regulatory, and business requirements for purchasing policy implementation; conducts purchasing operations oversight and reviews performance; identifies with clients opportunities for reduction of vendor base, cost savings, and increased effectiveness through long-term contractual relationships; conducts market analysis to identify quality vendors for long-term relationships; ensures legality of business instruments; negotiates and awards contracts securing best value: awards financial assistance instruments to entities providing for the general public benefit: solicits proposals for and negotiates and awards contracts for unique or limited-need construction services and non construction services and goods; provides guick response, limited competition order placement through purchase order, credit card, or other simplified purchasing techniques; monitors contract performance on the part of the contractor; and negotiates with a broad range of support service contractors for erection of transmission system facilities using either furnished material, contractor-furnished material, or a combination of those options when a best-value decision indicates that utilization of in-house forces is not feasible.

APPENDIX B: DOE EBM TO FEA BRM ALIGNMENT

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Construction	Defense Facilities Construction	Services for Citizens	Defense and National Security	Operational Defense
Construction	Defense Facilities Construction	Mode of Delivery	Public Goods Creation and Management	Construction
Construction	Nuclear Energy Facilities Construction	Services for Citizens	Energy	Energy Production
Construction	Nuclear Energy Facilities Construction	Mode of Delivery	Public Goods Creation and Management	Construction
Construction	Strategic Fuel Reserves Infrastructure Construction	Services for Citizens	Energy	Energy Supply
Construction	Strategic Fuel Reserves Infrastructure Construction	Mode of Delivery	Public Goods Creation and Management	Construction
Construction	Science and Research Facilities Construction	Services for Citizens	Energy	Energy Supply
Construction	Science and Research Facilities Construction	Mode of Delivery	Public Goods Creation and Management	Construction
Construction	Science and Research Infrastructure Construction	Services for Citizens	Energy	Energy Production
Construction	Science and Research Facilities Construction	Mode of Delivery	Public Goods Creation and Management	Construction

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Construction	Science and Research Facilities Construction	Services for Citizens	Energy	Energy Conservation and Preparedness
Construction	Science and Research Facilities Construction	Mode of Delivery	Public Goods Creation and Management	Construction
Construction	Science and Research Facilities Construction	Services for Citizens	Environmental Management	Environmental Remediation
Construction	Science and Research Facilities Construction	Mode of Delivery	Public Goods Creation and Management	Construction
Construction	Science and Research Facilities Construction	Services for Citizens	General Science and Innovation	Scientific and Technological Research and Innovation
Construction	Science and Research Facilities Construction	Mode of Delivery	Public Goods Creation and Management	Construction
Construction	Science and Research Facilities Construction	Services for Citizens	Defense and National Security	Strategic Defense
Construction	Science and Research Facilities Construction	Mode of Delivery	Public Goods Creation and Management	Construction
Construction	Science and Research Facilities Construction	Services for Citizens	Defense and National Security	Operational Defense
Construction	Science and Research Facilities Construction	Mode of Delivery	Public Goods Creation and Management	Construction
Construction	Toxic Waste Repository Construction	Services for Citizens	Environmental Management	Pollution Prevention and Control
Construction	Toxic Waste Repository Construction	Mode of Delivery	Public Goods Creation and Management	Construction

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Counterintelligence	Counterintelligence Information Dissemination	Services for Citizens	Defense and National Security	Operational Defense
Counterintelligence	Counterintelligence Information Dissemination	Mode of Delivery	Direct Services for Citizens	Military Operations
Counterintelligence	Cyber Threat Response	Services for Citizens	Defense and National Security	Operational Defense
Counterintelligence	Cyber Threat Response	Mode of Delivery	Direct Services for Citizens	Military Operations
Counterintelligence	Investigations	Services for Citizens	Defense and National Security	Operational Defense
Counterintelligence	Investigations	Mode of Delivery	Direct Services for Citizens	Military Operations
Education	Defense Education	Services for Citizens	Defense and National Security	Operational Defense
Education	Defense Education	Mode of Delivery	Direct Services for Citizens	Military Operations
Education	Student Development	Services for Citizens	Education	Elementary, Secondary, and Vocational Education
Education	Student Development	Mode of Delivery	Direct Services for Citizens	Civilian Operations
Education	Student Development	Services for Citizens	Education	Higher Education
Education	Student Development	Mode of Delivery	Direct Services for Citizens	Civilian Operations
Education	Teacher Development	Services for Citizens	Education	Elementary, Secondary, and Vocational Education
Education	Teacher Development	Mode of Delivery	Direct Services for Citizens	Civilian Operations
Education	Teacher Development	Services for Citizens	Education	Higher Education

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Education	Teacher Development	Mode of Delivery	Direct Services for Citizens	Civilian Operations
Education	Historic Preservation	Service for Citizens	Education	Cultural and Historic Preservation
Education	Historic Preservation	Mode of Delivery	Public Goods and Creation Management	Public Resources, Facilities & Infrastructure Management
Education	University Reactor Infrastructure and Education Assistance	Service for Citizens	Education	Higher Education
Education	University Reactor Infrastructure and Education Assistance	Mode of Delivery	Financial Vehicles: Transfers to State and Local Governments	Project Competitive Grants
Emergency Management	Emergency Management Planning and Procedure Development	Service for Citizens	Disaster Management	Disaster Preparedness and Planning
Emergency Management	Emergency Management Planning and Procedure Development	Mode of Delivery	Knowledge Creation and Management	Research and Development
Emergency Management	Emergency Response	Services for Citizens	Disaster Management	Emergency Response
Emergency Management	Emergency Response	Mode of Delivery	Direct Services for Citizens	Military Operations
Emergency Management	Foreign Nuclear Risk Reduction / Safety	Services for Citizens	International Affairs and Commerce	Foreign Affairs
Emergency Management	Foreign Nuclear Risk Reduction / Safety	Mode of Delivery	Knowledge Creation and Management	Research and Development
Engineering	Weapons Engineering	Services for Citizens	Defense and National Security	Operational Defense

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Engineering	Weapons Engineering	Mode of Delivery	Knowledge Creation and Management	Research and Development
Engineering	Non Proliferation Technology Engineering	Services for Citizens	Homeland Security	Catastrophic Defense
Engineering	Non Proliferation Technology Engineering	Mode of Delivery	Knowledge Creation and Management	Research and Development
Engineering	Naval Reactor Technology Engineering	Services for Citizens	Defense and National Security	Operational Defense
Engineering	Naval Reactor Technology Engineering	Mode of Delivery	Knowledge Creation and Management	Research and Development
Engineering	Energy Transmission and Distribution Technology Engineering	Services for Citizens	Energy	Supply
Engineering	Energy Transmission and Distribution Technology Engineering	Mode of Delivery	Knowledge Creation and Management	Research and Development
Engineering	Energy Efficiency Technology Engineering	Services for Citizens	Energy	Energy Conservation and Preparedness
Engineering	Energy Efficiency Technology Engineering	Mode of Delivery	Knowledge Creation and Management	Research and Development
Engineering	Renewable Energy Technology Engineering	Services for Citizens	Energy	Energy Supply
Engineering	Renewable Energy Technology Engineering	Mode of Delivery	Knowledge Creation and Management	Research and Development
Engineering	Fossil Fuel Technology Engineering	Services for Citizens	Energy	Energy Production

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Engineering	Fossil Fuel Technology Engineering	Mode of Delivery	Knowledge Creation and Management	Research and Development
Engineering	Nuclear Energy Technology Engineering	Services for Citizens	Energy	Energy Supply
Engineering	Nuclear Energy Technology Engineering	Mode of Delivery	Knowledge Creation and Management	Research and Development
Engineering	Cleanup Technology Engineering	Services for Citizens	Environmental Management	Environmental Remediation
Engineering	Cleanup Technology Engineering	Mode of Delivery	Knowledge Creation and Management	Research and Development
Engineering	Security Technology Engineering	Services for Citizens	Homeland Security	Key Asset and Critical Infrastructure Protection
Engineering	Security Technology Engineering	Mode of Delivery	Knowledge Creation and Management	Research and Development
Engineering	Waste Disposition Technology Engineering	Services for Citizens	Environmental Management	Pollution Prevention and Control
Engineering	Waste Disposition Technology Engineering	Mode of Delivery	Knowledge Creation and Management	Research and Development
Engineering	Environmental Services Technology Engineering	Services for Citizens	Environmental Management	Environmental Monitoring and Forecasting
Engineering	Environmental Services Technology Engineering	Mode of Delivery	Knowledge Creation and Management	Research and Development
Environmental Services	Environmental Safeguarding	Services for Citizens	Environmental Management	Pollution Prevention and Control
Environmental Services	Environmental	Mode of Delivery	Regulatory Compliance and	Standard Setting/Reporting

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
	Safeguarding		Enforcement	Guideline Development
Environmental Services	Environmental Monitoring	Services for Citizens	Environmental Management	Environmental Monitoring and Forecasting
Environmental Services	Environmental Monitoring	Mode of Delivery	Regulatory Compliance and Enforcement	Inspections and Auditing
Facilities and Infrastructure Management	Defense Facilities Acquisition	Services for Citizens	Defense and National Security	Operational Defense
Facilities and Infrastructure Management	Defense Facilities Acquisition	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Facilities and Infrastructure Management	Defense Facilities Disposition	Services for Citizens	Defense and National Security	Operational Defense
Facilities and Infrastructure Management	Defense Facilities Disposition	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Facilities and Infrastructure Management	Defense Facilities Maintenance	Services for Citizens	Defense and National Security	Operational Defense
Facilities and Infrastructure Management	Defense Facilities Maintenance	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Facilities and Infrastructure	Defense Facilities Operations	Services for Citizens	Defense and National Security	Operational Defense

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Management				
Facilities and Infrastructure Management	Defense Facilities Operations	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Facilities and Infrastructure Management	Defense Facilities Security	Services for Citizens	Homeland Security	Key Asset and Critical Infrastructure Protection
Facilities and Infrastructure Management	Defense Facilities Security	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Facilities and Infrastructure Management	Nuclear Energy Facilities and Infrastructure Acquisition	Services for Citizens	Energy	Energy Supply
Facilities and Infrastructure Management	Nuclear Energy Facilities and Infrastructure Acquisition	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Facilities and Infrastructure Management	Nuclear Energy Facilities and Infrastructure Disposition	Services for Citizens	Energy	Energy Supply
Facilities and Infrastructure Management	Nuclear Energy Facilities and Infrastructure Disposition	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Facilities and Infrastructure Management	Nuclear Energy Facilities and Infrastructure Maintenance	Services for Citizens	Energy	Energy Supply

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Facilities and Infrastructure Management	Nuclear Energy Facilities and Infrastructure Maintenance	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Facilities and Infrastructure Management	Nuclear Energy Facilities and Infrastructure Operations	Services for Citizens	Energy	Energy Supply
Facilities and Infrastructure Management	Nuclear Energy Facilities and Infrastructure Operations	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Facilities and Infrastructure Management	Nuclear Energy Facilities and Infrastructure Security	Services for Citizens	Homeland Security	Key Asset and Critical Infrastructure Protection
Facilities and Infrastructure Management	Nuclear Energy Facilities and Infrastructure Security	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Facilities and Infrastructure Management	Strategic Fuel Reserves Facilities Maintenance	Services for Citizens	Energy	Energy Supply
Facilities and Infrastructure Management	Strategic Fuel Reserves Facilities Maintenance	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Facilities and Infrastructure Management	Strategic Fuel Reserves Facilities Operations	Services of Citizens	Energy	Energy Supply
Facilities and Infrastructure	Strategic Fuel Reserves	Mode of Delivery	Public Goods Creation and	Public Resources, Facilities, and

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Management	Facilities Operations		Management	Infrastructure Management
Facilities and Infrastructure Management	Strategic Fuel Reserves Facilities Security	Services for Citizens	Homeland Security	Key Asset and Critical Infrastructure Protection
Facilities and Infrastructure Management	Strategic Fuel Reserves Facilities Security	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Facilities and Infrastructure Management	Science and Research Facilities and Infrastructure Acquisition	Services for Citizens	General Science and Innovation	Scientific and Technological Research and Innovation
Facilities and Infrastructure Management	Science and Research Facilities and Infrastructure Acquisition	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Facilities and Infrastructure Management	Science and Research Facilities and Infrastructure Disposition	Services for Citizens	General Science and Innovation	Scientific and Technological Research and Innovation
Facilities and Infrastructure Management	Science and Research Facilities and Infrastructure Disposition	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Facilities and Infrastructure Management	Science and Research Facilities and Infrastructure Maintenance	Services for Citizens	General Science and Innovation	Scientific and Technological Research and Innovation
Facilities and Infrastructure	Science and Research Facilities and Infrastructure	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Management	Maintenance			Management
Facilities and Infrastructure Management	Science and Research Facilities and Infrastructure Operations	Services for Citizens	General Science and Innovation	Scientific and Technological Research and Innovation
Facilities and Infrastructure Management	Science and Research Facilities and Infrastructure Operations	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Facilities and Infrastructure Management	Science and Research Facilities and Infrastructure Security	Services for Citizens	Homeland Security	Key Asset and Critical Infrastructure Protection
Facilities and Infrastructure Management	Science and Research Facilities and Infrastructure Security	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Facilities and Infrastructure Management	Toxic Waste Repository Acquisition	Services for Citizens	Environmental Management	Pollution Prevention and Control
Facilities and Infrastructure Management	Toxic Waste Repository Acquisition	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Facilities and Infrastructure Management	Toxic Waste Repository Maintenance	Services for Citizens	Environmental Management	Pollution Prevention and Control
Facilities and Infrastructure Management	Toxic Waste Repository Maintenance	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Facilities and Infrastructure Management	Toxic Waste Repository Operations	Services for Citizens	Environmental Management	Pollution Prevention and Control
Facilities and Infrastructure Management	Toxic Waste Repository Operations	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Facilities and Infrastructure Management	Toxic Waste Repository Security	Services for Citizens	Homeland Security	Key Asset and Critical Infrastructure Protection
Facilities and Infrastructure Management	Toxic Waste Repository Security	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
General Energy Data and Statistics	Energy Markets Forecasting	Services for Citizens	Energy	Energy Supply
General Energy Data and Statistics	Energy Markets Forecasting	Mode of Delivery	Knowledge Creation and Management	General Purpose Data and Statistics
General Energy Data and Statistics	Energy Transmission and Distribution Modeling and Simulation	Services for Citizens	Energy	Energy Supply
General Energy Data and Statistics	Energy Transmission and Distribution Modeling and Simulation	Mode of Delivery	Knowledge Creation and Management	General Purpose Data and Statistics
General Energy Data and Statistics	Energy Use and Efficiency Statistics	Services for Citizens	Energy	Energy Conservation and Preparedness
General Energy Data and Statistics	Energy Use and Efficiency Statistics	Mode of Delivery	Knowledge Creation and Management	General Purpose Data and Statistics

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
General Energy Data and Statistics	Fossil Energy Statistics	Services for Citizens	Energy	Energy Supply
General Energy Data and Statistics	Fossil Energy Statistics	Mode of Delivery	Knowledge Creation and Management	General Purpose Data and Statistics
General Energy Data and Statistics	Nuclear Energy Statistics	Services for Citizens	Energy	Energy Supply
General Energy Data and Statistics	Nuclear Energy Statistics	Mode of Delivery	Knowledge Creation and Management	General Purpose Data and Statistics
General Energy Data and Statistics	Renewable Energy Statistics	Services for Citizens	Energy	Energy Supply
General Energy Data and Statistics	Renewable Energy Statistics	Mode of Delivery	Knowledge Creation and Management	General Purpose Data and Statistics
Intelligence	TBD	Services for Citizens	Intelligence Operations	TBD
Intelligence	TBD	Mode of Delivery	Direct Services for Citizens	Military Operations
International Affairs	Energy Transmission Industry Regulatory Compliance	Services for Citizens	International Affairs and Commerce	Global Trade
International Affairs	Energy Transmission Industry Regulatory Compliance	Mode of Delivery	Direct Services for Citizens	Civilian Operations
International Affairs	International Technology Development Transfer	Services for Citizens	International Affairs and Commerce	International Development and Humanitarian Aid
International Affairs	International Technology Transfer	Mode of Delivery	Direct Services for Citizens	Civilian Operations
International Affairs	Non Proliferation	Services for Citizens	International Affairs and	Foreign Affairs

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
	Agreement Development		Commerce	
International Affairs	Non Proliferation Agreement Development	Mode of Delivery	Direct Services for Citizens	Military Operations
International Affairs	Oil and Gas Import and Export Regulatory Development:	Services for Citizens	International Affairs and Commerce	Global Trade
International Affairs	Oil and Gas Import and Export Regulatory Development:	Mode of Delivery	Direct Services for Citizens	Civilian Operations
Manufacturing and Production	Naval Reactor Production	Services for Citizens	Defense and National Security	Operational Defense
Manufacturing and Production	Naval Reactor Production	Mode of Delivery	Public Goods Creation and Management	Manufacturing
Manufacturing and Production	Nuclear Fuel Production	Services for Citizens	General Science and Innovation	Scientific and Technological Research and Innovation
Manufacturing and Production	Nuclear Fuel Production	Mode of Delivery	Public Goods Creation and Management	Manufacturing
Manufacturing and Production	Radioactive Isotope Production	Services for Citizens	General Science and Innovation	Scientific and Technological Research and Innovation
Manufacturing and Production	Radioactive Isotope Production	Mode of Delivery	Public Goods Creation and Management	Manufacturing
Manufacturing and Production	Weapons Production	Services for Citizens	Defense and National Security	Operational Defense
Manufacturing and	Weapons Production	Mode of Delivery	Public Goods Creation and	Manufacturing

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Production			Management	
Materials and Components Management	Naval Reactor Operations	Services for Citizens	Defense and National Security	Operational Defense
Materials and Components Management	Naval Reactor Operations	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Materials and Components Management	Nuclear Fuel Supply Management	Services for Citizens	General Science and Innovation	Scientific and Technological Research and Innovation
Materials and Components Management	Nuclear Fuel Supply Management	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Materials and Components Management	Nuclear Material Transport	Services for Citizens	Defense and National Security	Operational Defense
Materials and Components Management	Nuclear Material Transport	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Materials and Components Management	Strategic Fuel Supply Management	Services for Citizens	Energy	Energy Supply
Materials and Components Management	Strategic Fuel Supply Management	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Materials and Components Management	Toxic Waste Management	Services for Citizens	Energy	Pollution Prevention and Control
Materials and Components Management	Toxic Waste Management	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Materials and Components Management	Toxic Waste Transport	Services for Citizens	Energy	Pollution Prevention and Control
Materials and Components Management	Toxic Waste Transport	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure Management
Mission Regulatory Development	Energy Efficiency Standards Development	Services for Citizens	Energy	Energy Conservation and Preparedness
Mission Regulatory Development	Energy Efficiency Standards Development	Mode of Delivery	Regulatory Compliance and Enforcement	Standard Setting/Reporting Guideline Development
Mission Training	Emergency Management Training	Services for Citizens	Disaster Management	Emergency Response
Mission Training	Emergency Management Training	Mode of Delivery	Knowledge Creation and Management	Advising and Consulting
Mission Training	Naval Reactor Training	Services for Citizens	Defense and National Security	Operational Defense
Mission Training	Naval Reactor Training	Mode of Delivery	Knowledge Creation and Management	Advising and Consulting
Mission Training	Nuclear Weapons Detection Training	Services for Citizens	Homeland Security	Border and Transportation

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function Security
Mission Training	Nuclear Weapons Detection Training	Mode of Delivery	Knowledge Creation and Management	Advising and Consulting
Mission Training	Power Transmission and Distribution Training	Services for Citizens	Energy	Energy Resource Management
Mission Training	Power Transmission and Distribution Training	Mode of Delivery	Knowledge Creation and Management	Advising and Consulting
Mission Training	Safety and Security Training	Services for Citizens	Homeland Security	Key Asset and Infrastructure Protection
Mission Training	Safety and Security Training	Mode of Delivery	Knowledge Creation and Management	Advising and Consulting
Non Proliferation	Dismantlement of Nuclear Weapons Stockpiles	Services for Citizens	Defense and National Security	Operational Defense
Non Proliferation	Dismantlement of Nuclear Weapons Stockpiles	Mode of Delivery	Direct Services for Citizens	Military Operations
Non Proliferation	Downsizing of Nuclear Weapons Infrastructure	Services for Citizens	Defense and National Security	Operational Defense
Non Proliferation	Downsizing of Nuclear Weapons Infrastructure	Mode of Delivery	Direct Services for Citizens	Military Operations
Non Proliferation	Fissile Materials Disposition	Services for Citizens	Defense and National Security	Operational Defense
Non Proliferation	Fissile Materials Disposition	Mode of Delivery	Direct Services for Citizens	Military Operations
Non Proliferation	Nuclear Materials Detection	Services for Citizens	Homeland Security	Catastrophic Defense
Non Proliferation	Nuclear Materials Detection	Mode of Delivery	Direct Services for Citizens	Civilian Operations

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Non Proliferation	Nuclear Weapons Monitoring	Services for Citizens	Defense and National Security	Operational Defense
Non Proliferation	Nuclear Weapons Monitoring	Mode of Delivery	Direct Services for Citizens	Military Operations
Non Proliferation	Weapons of Mass Destruction Information Control	Services for Citizens	Homeland Security	Key Asset and Critical Infrastructure Protection
Non Proliferation	Weapons of Mass Destruction Information Control	Mode of Delivery	Public Goods Creation and Management	Information Infrastructure Management
Nuclear Weapons Stockpile Certification and Testing	Stockpile Certification	Services for Citizens	Defense and National Security	Operational Defense
Nuclear Weapons Stockpile Certification and Testing	Stockpile Certification	Mode of Delivery	Direct Services for Citizens	Military Operations
Nuclear Weapons Stockpile Certification and Testing	Nuclear Weapons Testing	Services for Citizens	Defense and National Security	Operational Defense
Nuclear Weapons Stockpile Certification and Testing	Nuclear Weapons Testing	Mode of Delivery	Direct Services for Citizens	Military Operations
Partnership Management	Defense Partnership Management	Services for Citizens	Defense and National Security	Strategic Defense
Partnership Management	Defense Partnership Management	Mode of Delivery	Direct Services for Citizens	Military Operations
Partnership Management	Energy Efficiency Partnership Management	Services for Citizens	Energy	Energy Conservation and Preparedness
Partnership Management	Energy Efficiency	Mode of Delivery	Direct Services for Citizens	Civilian Operations

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
	Partnership Management			
Partnership Management	Environmental Services Partnership Management	Services for Citizens	Environment	Environmental Remediation
Partnership Management	Environmental Services Partnership Management	Mode of Delivery	Direct Services for Citizens	Civilian Operations
Partnership Management	Fossil Energy Partnership Management	Services for Citizens	Energy	Energy Supply
Partnership Management	Fossil Energy Partnership Management	Mode of Delivery	Direct Services for Citizens	Civilian Operations
Partnership Management	Nuclear Weapons Information Protection Partnership Management	Services for Citizens	Homeland Security	Key Asset and Critical Infrastructure Protection
Partnership Management	Nuclear Weapons Information Protection Partnership Management	Mode of Delivery	Direct Services for Citizens	Military Operations
Partnership Management	Renewable Energy Partnership Management	Services for Citizens	Energy	Energy Supply
Partnership Management	Renewable Energy Partnership Management	Mode of Delivery	Direct Services for Citizens	Civilian Operations
Partnership Management	Scientific Research Partnership Management	Services for Citizens	General Science and Innovation	Scientific and Technological Research and Innovation
Partnership Management	Scientific Research Partnership Management	Mode of Delivery	Direct Services for Citizens	Civilian Operation
Power Transmission and Marketing	Power Marketing	Services for Citizens	Energy	Energy Supply
Power Transmission and Marketing	Power Marketing	Mode of Delivery	Direct Services for Citizens	Civilian Operations

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Power Transmission and Marketing	Transmission	Services for Citizens	Energy	Energy Resource Management
Power Transmission and Marketing	Transmission	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities, and Infrastructure
Power Transmission and Marketing	Cost Recovery	Services for Citizens	Energy	Energy Supply
Power Transmission and Marketing	Cost Recovery	Mode of Delivery	Direct Services for Citizens	Civilian Operations
Research and Development	Basic Energy Sciences R&D	Services for Citizens	General Science and Innovation	Scientific and Technological Research and Innovation
Research and Development	Basic Energy Sciences R&D	Mode of Delivery	Knowledge Creation and Management	Research and Development
Research and Development	Biological and Environmental R&D	Services for Citizens	General Science and Innovation	Scientific and Technological Research and Innovation
Research and Development	Biological and Environmental R&D	Mode of Delivery	Knowledge Creation and Management	Research and Development
Research and Development	Cleanup R&D	Services for Citizens	Environmental Management	Environmental Remediation
Research and Development	Cleanup R&D	Mode of Delivery	Knowledge Creation and Management	Research and Development
Research and Development	Computational Science R&D	Services for Citizens	General Science and Innovation	Scientific and Technological Research and Innovation

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Research and Development	Computational Science R&D	Mode of Delivery	Knowledge Creation and Management	Research and Development
Research and Development	Energy Efficiency R&D	Services for Citizens	Energy	Energy Conservation and Preparedness
Research and Development	Energy Efficiency R&D	Mode of Delivery	Knowledge Creation and Management	Research and Development
Research and Development	Energy Transmission and Distribution R&D	Services for Citizens	Energy	Energy Resource Management
Research and Development	Energy Transmission and Distribution R&D	Mode of Delivery	Knowledge Creation and Management	Research and Development
Research and Development	Environmental Services R&D	Services for Citizens	Environmental Management	Pollution Prevention and Control
Research and Development	Environmental Services R&D	Mode of Delivery	Knowledge Creation and Management	Research and Development
Research and Development	Fossil Fuel R&D	Services for Citizens	Energy	Energy Supply
Research and Development	Fossil Fuel R&D	Mode of Delivery	Knowledge Creation and Management	Research and Development
Research and Development	Fusion Energy Sciences R&D	Services for Citizens	General Science and Innovation	Scientific and Technological Research and Innovation
Research and Development	Fusion Energy Sciences R&D	Mode of Delivery	Knowledge Creation and Management	Research and Development
Research and Development	High Energy Physics R&D	Services for Citizens	General Science and Innovation	Scientific and Technological Research and Innovation

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Research and Development	High Energy Physics R&D	Mode of Delivery	Knowledge Creation and Management	Research and Development
Research and Development	Naval Reactor R&D	Services for Citizens	Defense and National Security	Operational Defense
Research and Development	Naval Reactor R&D	Mode of Delivery	Knowledge Creation and Management	Research and Development
Research and Development	Non Proliferation R&D	Services for Citizens	Homeland Security	Catastrophic Defense
Research and Development	Non Proliferation R&D	Mode of Delivery	Knowledge Creation and Management	Research and Development
Research and Development	Nuclear Energy R&D	Services for Citizens	Energy	Energy Supply
Research and Development	Nuclear Energy R&D	Mode of Delivery	Knowledge Creation and Management	Research and Development
Research and Development	Nuclear Physics R&D	Services for Citizens	General Science and Innovation	Scientific and Technological Research and Innovation
Research and Development	Nuclear Physics R&D	Mode of Delivery	Knowledge Creation and Management	Research and Development
Research and Development	Renewable Energy R&D	Services for Citizens	Energy	Energy Supply
Research and Development	Renewable Energy R&D	Mode of Delivery	Knowledge Creation and Management	Research and Development
Research and Development	Security R&D	Services for Citizens	Homeland Security	Key Asset and Critical Infrastructure Protection

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Research and Development	Security R&D	Mode of Delivery	Knowledge Creation and Management	Research and Development
Research and Development	Toxic Waste Disposition R&D	Services for Citizens	Environmental Management	Pollution Prevention and Control
Research and Development	Toxic Waste Disposition R&D	Mode of Delivery	Knowledge Creation and Management	Research and Development
Research and Development	Weapons R&D	Services for Citizens	Defense and National Security	Operational Defense
Research and Development	Weapons R&D	Mode of Delivery	Knowledge Creation and Management	Research and Development
Safety and Health	Safety and Health Compliance	Services for Citizens	Health	Population Health Management and Consumer Safety
Safety and Health	Safety and Health Compliance	Mode of Delivery	Direct Services for Citizens	Civilian Operations
Safety and Health	Safety and Health Operations	Services for Citizens	Health	Population Health Management and Consumer Safety
Safety and Health	Safety and Health Operations	Mode of Delivery	Direct Services for Citizens	Civilian Operations
Site and Facility Remediation	Facility Cleanup Operations	Services for Citizens	Environmental Management	Environmental Remediation
Site and Facility Remediation	Facility Cleanup Operations	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities & Infrastructure Management
Site and Facility Remediation	Site Closure	Services for Citizens	Environmental Management	Environmental Remediation

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
Site and Facility Remediation	Site Closure	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities & Infrastructure Management
Site and Facility Remediation	Soil Cleanup Operations	Services for Citizens	Environmental Management	Environmental Remediation
Site and Facility Remediation	Soil Cleanup Operations	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities & Infrastructure Management
Site and Facility Remediation	Waste Cleanup Operations	Services for Citizens	Environmental Management	Environmental Remediation
Site and Facility Remediation	Waste Cleanup Operations	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities & Infrastructure Management
Site and Facility Remediation	Water Cleanup Operations	Services for Citizens	Environmental Management	Environmental Remediation
Site and Facility Remediation	Water Cleanup Operations	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities & Infrastructure Management
Site and Facility Stewardship	Asset Transfer	Services for Citizens	Environmental Management	Environmental Remediation
Site and Facility Stewardship	Asset Transfer	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities & Infrastructure Management
Site and Facility Stewardship	Surveillance, Monitoring, and Maintenance	Services for Citizens	Environmental Management	Pollution Prevention and Control
Site and Facility Stewardship	Surveillance, Monitoring, and Maintenance	Mode of Delivery	Public Goods Creation and Management	Public Resources, Facilities & Infrastructure

DOE Function	DOE Sub Function	FEA BRM Business Area	FEA BRM Line of Business	FEA BRM Sub Function
				Management